

2023 ANNUAL GROUNDWATER REPORT**REVIEWED**

By Mike Buchanan at 4:04 pm, Jun 27, 2024

Fogelson 4-1**Incident Number: nAUTOfAB000192****Meter Code: 73220****T29N, R11W, Sec 4, Unit P****SITE DETAILS**

Site Location: Latitude: 36.750660 N, Longitude: -107.991560 W
Land Type: Federal
Former Operator: Burlington Resources (well P&A'd)

SITE BACKGROUND

Environmental remediation activities at Fogelson 4-1 (Site) are being managed when constituents have demonstrated below the WQCC human health standards). This Remediation Plan was conditionally approved by the New Mexico Oil Conservation Division (NMOCD) in correspondence dated November 30, 1995; and the NMOCD appropriate for the site. The Site was operated by Burlington Resources Oil & Gas Company LP (BR) until January 2014, and the final reclamation was completed by BR in 2016.

Review of the Fogelson 4-1 2023 Annual Groundwater Report: Content Satisfactory

1. Conduct groundwater monitoring events as scheduled on a semi-annual basis.
2. Conduct analyses for BTEX, EPA method 8260 on key wells.
3. Increase sampling to quarterly
4. Continue removal of LNAPL as appropriate for the site
5. Submit the 2024 Annual Report by April 1, 2025, to OCD.

The Site is located on Federal land. An initial site assessment was completed in March 1994, and an excavation of 65 cubic yards (cy), to a depth of approximately 11 feet below ground surface (bgs), was completed in April 1994. Monitoring wells were installed in 1995 (MW-1, MW-2, and MW-3), 2017 (MW-4, MW-5, MW-6, and MW-7), and 2018 (MW-1R [replaced MW-1], MW-8, and MW-9). Monitoring wells MW-10 and MW-11 were advanced and installed in 2022. One soil boring (SB-12) was also advanced in 2022. A detailed Site history is presented in Appendix A.

The location of the Site is depicted on Figure 1. A Site Plan map depicting the locations of monitoring wells, soil borings, and current and historical site features is provided as Figure 2. In August 2001 a nutrient injection of an Oxygen Release Compound was completed. Historically, light non-aqueous phase liquid (LNAPL) has periodically been encountered and recovered from MW-1 (MW-1R) and MW-5. Mobile dual-phase extraction (MDPE) events to enhance LNAPL recovery were conducted in 2018 and 2021. Quarterly manual LNAPL recovery began in the second quarter of 2020 and has continued through 2023. Groundwater sampling is being conducted on a semi-annual basis.

GROUNDWATER SAMPLING ACTIVITIES

Stantec provided field work notifications via electronic mail (e-mail) to NMOCD on May 12, 2023, and November 2, 2023, prior to initiating groundwater sampling activities at the Site. Copies of the 2023 NMOCD notifications are provided in Appendix B. On May 18 and November 8, 2023, water levels were gauged at each monitoring well. During both events, groundwater samples were collected from MW-1R, MW-4, MW-7, MW-8, MW-9, and MW-11. During the May 18, 2023 event, groundwater samples were also collected from MW-2, MW-3, MW-6, and MW-10. During each sampling event, groundwater samples were collected using HydraSleeve™ (HydraSleeve) no-purge groundwater sampling devices. The HydraSleeves were set during the previous sampling event. The HydraSleeves were positioned to collect a sample from the screened interval by setting the bottom of the sleeve approximately 0.5 foot above the bottom of the screened interval.

The groundwater samples were placed into laboratory-supplied sample containers, packed on ice, and shipped under standard chain-of-custody protocols to Eurofins Environment Testing Southeast, LLC, (Eurofins) in Pensacola, Florida where they were analyzed for the presence of benzene, toluene,

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ethylbenzene, and total xylenes (BTEX) according to United States Environmental Protection Agency (EPA) Method 8260. One laboratory-provided trip blank and one blind field duplicate were also collected during each groundwater sampling event.

The unused sample water was combined in a waste container and transported to Envirotech, Inc. (Envirotech) in Bloomfield, NM for disposal. Waste disposal documentation is included as Appendix C.

LNAPL RECOVERY

As documented in EPCGP's letter dated January 5, 2021, EPCGP initiated quarterly LNAPL recovery activities in the second calendar quarter of 2020. Documentation of NMOCD notification of site LNAPL recovery activities in 2023 is provided in Appendix B. LNAPL was observed in monitoring well MW-5 during the March, May, August, and November recovery events in 2023.

During the groundwater sampling site visits in May and November, the recovered LNAPL was disposed of with wastewater generated during the monitoring well sampling activities. Recovered LNAPL from the March and August site visits was disposed at Envirotech (Appendix C).

SUMMARY TABLES

Historic analytical and water level data are summarized in Table 2 and Table 3, respectively. LNAPL recovery data is summarized on Table 1.

SITE MAPS

Groundwater analytical maps (Figures 3 and 5) and groundwater elevation contour maps (Figures 4 and 6) summarize results of the 2023 groundwater sampling and gauging events.

ANALYTICAL LAB REPORTS

The groundwater analytical lab reports are included as Appendix D.

GROUNDWATER RESULTS

- The groundwater elevations indicate the flow direction at the Site was generally to the northwest during 2023 (see Figures 4 and 6).
- LNAPL was observed in MW-5 during the May and November 2023 sampling events, and in MW-10 during the November 2023 sampling event; therefore, no groundwater samples were collected from these locations.
- The groundwater sample collected from MW-10 during the May 2023 sampling event exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard (10 micrograms per liter [$\mu\text{g/L}$]) for benzene in groundwater. Benzene was not detected or was detected below the NMWQCC standard in the remaining groundwater samples collected from site monitoring wells in 2023.

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- Concentrations of toluene were either below the NMWQCC standard (750 µg/L) or not detected in the Site monitoring wells sampled in 2023.
- Concentrations of ethylbenzene were either below the NMWQCC standard (750 µg/L) or were not detected in each of the Site monitoring wells sampled in 2023.
- Concentrations of total xylenes were either below the NMWQCC standard (620 µg/L) or were not detected in each of the Site monitoring wells sampled in 2023.
- Field duplicate samples were collected from monitoring well MW-10 during the May 2023 sampling event and from MW-1R during the November 2023 sampling event. There were no significant differences between concentrations in the primary and duplicate samples.
- Detectable concentrations of BTEX constituents were not reported in the trip blanks collected and analyzed as part of the 2023 groundwater monitoring events.

PLANNED FUTURE ACTIVITIES

Groundwater monitoring events will continue to be conducted on a semi-annual basis. As site closure is not being recommended at this time, groundwater samples will be collected from key monitoring wells not containing LNAPL on a semi-annual basis and analyzed for BTEX constituents using EPA Method 8260. A field duplicate and trip blank will also be collected during each groundwater sampling event. Sampling of all site monitoring wells is conducted on a biennial basis, with the next site-wide sampling event to be conducted in the second calendar quarter of 2024.

Quarterly site visits will continue at the Site in 2024 to facilitate removal of measurable LNAPL where it is present.

The activities conducted in 2024, and their results, will be summarized in the 2024 Annual Report, to be submitted by April 1, 2025.

TABLES

TABLE 1 – LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

TABLE 2 – GROUNDWATER ANALYTICAL RESULTS

TABLE 3 – GROUNDWATER ELEVATION RESULTS

TABLE 1
LIGHT NON-AQUEOUS PHASE LIQUID RECOVERY SUMMARY

Fogelson 4-1 Com #14						
Well ID - MW-1	Depth to LNAPL (Feet)	Depth to Water (Feet)	Measured Thickness (Feet)	LNAPL Recovered (gal)	Water Recovered (gal)	Recovery Type
Date						
4/16/2016	45.00	45.05	0.05	<0.01	0.01	manual
10/14/2016	45.12	45.12	<0.01	<0.01	0.01	manual
6/10/2017	45.25	45.30	0.05	<0.01	0.01	manual
11/13/2017	45.42	45.43	0.01	<0.01	0.01	manual
5/17/2018	45.48	45.48	<0.01	<0.01	0.01	manual
MW-1 replaced with MW-1R on 9/28/2018						
Total:				<0.01	0.05	

Well ID - MW-1R						
8/18/2020	47.69	47.69	<0.01	<0.01	0.12	manual
Total:				0	0.12	

Well ID - MW-5						
11/10/2019	44.87	44.99	0.12	0.08	0.10	manual
5/11/2020	44.84	45.01	0.17	0.46	0.33	manual
8/18/2020	46.03	46.08	0.05	0.05	0.26	manual
11/14/2020	45.06	45.10	0.04	<0.01	0.03	manual
3/17/2021	44.87	45.05	0.18	0.08	0.54	manual
5/22/2021	45.10	45.26	0.16	0.01	0.06	manual
8/27/2021	45.11	45.35	0.24	0.50	20.5	Mobile DPE*
11/14/2021	45.03	45.72	0.69	0.21	0.21	manual
3/22/2022	44.94	45.96	1.02	0.57	0.14	manual
5/21/2022	45.02	45.55	0.53	0.30	0.17	manual
7/29/2022	45.02	45.81	0.79	0.37	0.08	manual
10/30/2022	44.96	46.14	1.18	0.76	0.00	manual
3/30/2023	44.95	46.20	1.25	0.71	0.29	manual
5/18/2023	45.18	45.62	0.44	0.22	0.06	manual
8/31/2023	45.13	45.85	0.72	0.34	0.32	manual
11/8/2023	45.20	45.83	0.63	0.22	0.13	manual
Total:				4.32	22.77	

Well ID - MW-10						
11/8/2023	48.68	48.78	0.10	0.02	0.14	manual
Total:				0.02	0.14	

Notes:

gal = gallons.

DPE = dual phase extraction

* = Mobile Dual Phase Extraction (DPE) includes calculated recovered hydrocarbon vapors.

"LNAPL" = light non-aqueous phase liquid

LNAPL recovery data for 2015 and previous years documented in previously-submitted reports.

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	11/06/95	1520	1050	907	9180
MW-1	12/06/96	1110	388	713	7730
MW-1	03/10/97	1240	318	850	9050
MW-1	06/06/97	1080	268	747	7700
MW-1	03/30/98	1070	522	789	8430
MW-1	06/04/98	1090	627	837	8880
MW-1	06/15/99	1000	550	770	7800
MW-1	06/19/00	790	280	1100	9300
MW-1	10/02/00	580	600	950	8000
MW-1	12/05/00	420	610	770	6000
MW-1	05/30/01	340	470	710	4800
MW-1	11/26/01	420	330	760	3400
MW-1	05/15/02	430	230	900	6000
MW-1	06/10/02	NS	NS	NS	NS
MW-1	11/04/02	625	370	862	5210
MW-1	05/21/03	339	296	723	4730
MW-1	11/15/03	401	308	755	4700
MW-1	11/16/04	185	59.9	550	2800
MW-1	11/08/05	174	34.3	675	2440
MW-1	11/08/06	206	41.6	694	2460
MW-1	11/29/07	NS	NS	NS	NS
MW-1	01/25/08	NS	NS	NS	NS
MW-1	08/12/08	NS	NS	NS	NS
MW-1	11/07/08	NS	NS	NS	NS
MW-1	02/06/09	NS	NS	NS	NS
MW-1	05/04/09	NS	NS	NS	NS
MW-1	08/26/09	NS	NS	NS	NS
MW-1	11/03/09	230	24.2 J	901	3290
MW-1	02/11/10	NS	NS	NS	NS
MW-1	05/25/10	NS	NS	NS	NS
MW-1	09/24/10	NS	NS	NS	NS
MW-1	11/09/10	198	23.5	840	3170
MW-1	02/01/11	NS	NS	NS	NS
MW-1	05/03/11	NS	NS	NS	NS
MW-1	09/27/11	NS	NS	NS	NS
MW-1	11/16/11	171	3.8 J	818	2770
MW-1	02/16/12	NS	NS	NS	NS
MW-1	05/07/12	NS	NS	NS	NS
MW-1	06/04/13	20	9.3 J	650	2400
MW-1	09/09/13	160	20	760	3200
MW-1	12/13/13	150	41	630	2700

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Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-1	04/05/14	4.3	<0.38	20	76
MW-1	10/21/14	200	11	770	3600
MW-1	05/30/15	160	38	810	3700
MW-1	11/18/15	NS	NS	NS	NS
MW-1	04/16/16	NS	NS	NS	NS
MW-1	10/14/16	NS	NS	NS	NS
MW-1	06/10/17	NS	NS	NS	NS
MW-1	11/13/17	NS	NS	NS	NS
MW-1	05/17/18	NS	NS	NS	NS
MW-1 replaced with MW-1R on 9/28/2018					
MW-1R	10/28/18	1.6	<1.0	<1.0	180
MW-1R	05/23/19	2.5	<1.0	<1.0	<10
MW-1R	11/13/19	<1.0	<1.0	<1.0	<10
MW-1R	05/15/20	<1.0	<1.0	<1.0	<10
DUP-01(MW-1R)*	05/15/20	<1.0	<1.0	<1.0	<10
MW-1R	08/18/20	NS	NS	NS	NS
MW-1R	11/14/20	<1.0	<1.0	<1.0	<10
MW-1R	03/17/21	NS	NS	NS	NS
MW-1R	05/22/21	<1.0	<1.0	<1.0	<10
MW-1R	08/27/21	NS	NS	NS	NS
MW-1R	11/14/21	<1.0	<1.0	<1.0	<10
DUP-01(MW-1R)*	11/14/21	<1.0	<1.0	<1.0	<10
MW-1R	03/22/22	NS	NS	NS	NS
MW-1R	05/21/22	NS	NS	NS	NS
MW-1R	07/29/22	NS	NS	NS	NS
MW-1R	10/30/22	<1.0	<1.0	<1.0	<10
MW-1R	05/18/23	<1.0	<1.0	<1.0	<10
MW-1R	11/08/23	<1.0	<1.0	<1.0	<10
DUP-01(MW-1R)*	11/08/23	<1.0	<1.0	<1.0	<10
MW-2	07/27/00	<0.5	<0.5	8.8	<0.5
MW-2	05/30/01	<0.5	<0.5	7.5	1
MW-2	05/15/02	<0.5	<0.5	2	<1
MW-2	11/04/02	NS	NS	NS	NS
MW-2	05/21/03	NS	NS	NS	NS
MW-2	11/15/03	NS	NS	NS	NS
MW-2	11/16/04	NS	NS	NS	NS
MW-2	11/08/05	NS	NS	NS	NS
MW-2	11/08/06	NS	NS	NS	NS
MW-2	11/29/07	NS	NS	NS	NS
MW-2	08/12/08	NS	NS	NS	NS

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Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-2	11/07/08	NS	NS	NS	NS
MW-2	02/06/09	NS	NS	NS	NS
MW-2	05/04/09	NS	NS	NS	NS
MW-2	08/26/09	NS	NS	NS	NS
MW-2	11/03/09	NS	NS	NS	NS
MW-2	02/11/10	NS	NS	NS	NS
MW-2	05/25/10	NS	NS	NS	NS
MW-2	09/24/10	NS	NS	NS	NS
MW-2	11/09/10	<2	<2	<2	<6
MW-2	02/01/11	NS	NS	NS	NS
MW-2	05/03/11	NS	NS	NS	NS
MW-2	09/27/11	NS	NS	NS	NS
MW-2	11/16/11	<1	<1	<1	<3
MW-2	02/16/12	NS	NS	NS	NS
MW-2	05/07/12	NS	NS	NS	NS
MW-2	06/04/13	<0.14	<0.30	<0.20	<0.23
MW-2	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-2	12/13/13	<0.20	0.52 J	0.38 J	0.85 J
MW-2	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-2	10/21/14	<0.38	<0.70	<0.50	<1.6
MW-2	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-2	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-2	04/16/16	<1.0	<5.0	<1.0	<5.0
MW-2	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-2	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-2	11/13/17	<1.0	<1.0	<1.0	<10
MW-2	05/17/18	<1.0	<1.0	<1.0	<10
MW-2	10/28/18	<1.0	<1.0	<1.0	<10
MW-2	05/23/19	<1.0	<1.0	<1.0	<10
MW-2	11/13/19	NS	NS	NS	NS
MW-2	05/15/20	NS	NS	NS	NS
MW-2	11/14/20	NS	NS	NS	NS
MW-2	05/22/21	<1.0	<1.0	<1.0	<10
MW-2	08/27/21	NS	NS	NS	NS
MW-2	11/14/21	NS	NS	NS	NS
MW-2	05/21/22	NS	NS	NS	NS
MW-2	05/18/23	<1.0	<1.0	<1.0	<10
MW-2	11/08/23	NS	NS	NS	NS
MW-3	07/27/00	27	35	170	520
MW-3	05/30/01	1.3	<0.5	40	2.8

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Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-3	05/15/02	0.64	<0.5	17	1.2
MW-3	11/04/02	NS	NS	NS	NS
MW-3	05/21/03	<1	<1	18.2	<3
MW-3	11/15/03	NS	NS	NS	NS
MW-3	11/16/04	NS	NS	NS	NS
MW-3	11/08/05	NS	NS	NS	NS
MW-3	11/08/06	NS	NS	NS	NS
MW-3	11/29/07	NS	NS	NS	NS
MW-3	08/12/08	NS	NS	NS	NS
MW-3	11/07/08	NS	NS	NS	NS
MW-3	02/06/09	NS	NS	NS	NS
MW-3	05/04/09	NS	NS	NS	NS
MW-3	08/26/09	NS	NS	NS	NS
MW-3	11/03/09	NS	NS	NS	NS
MW-3	02/11/10	NS	NS	NS	NS
MW-3	05/25/10	NS	NS	NS	NS
MW-3	09/24/10	NS	NS	NS	NS
MW-3	11/09/10	<2	<2	1.9 J	<6
MW-3	02/01/11	NS	NS	NS	NS
MW-3	05/03/11	NS	NS	NS	NS
MW-3	09/27/11	NS	NS	NS	NS
MW-3	11/16/11	<1	<1	0.77 J	<3
MW-3	02/16/12	NS	NS	NS	NS
MW-3	05/07/12	NS	NS	NS	NS
MW-3	06/04/13	<0.14	<0.30	<0.20	<0.23
MW-3	09/09/13	<0.14	<0.30	<0.20	<0.23
MW-3	12/13/13	<0.20	0.56 J	<0.20	<0.65
MW-3	04/05/14	<0.20	<0.38	<0.20	<0.65
MW-3	10/21/14	<0.38	<0.70	0.96 J	<1.6
MW-3	05/30/15	<1.0	<5.0	<1.0	<5.0
MW-3	11/18/15	<1.0	<1.0	<1.0	<3.0
MW-3	04/16/16	<1.0	<5.0	<1.0	<5.0
MW-3	10/14/16	<1.0	<5.0	<1.0	<5.0
MW-3	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-3	11/13/17	<1.0	<1.0	<1.0	<10
MW-3	05/17/18	<1.0	<1.0	<1.0	<10
MW-3	10/28/18	<1.0	<1.0	<1.0	<10
MW-3	05/23/19	<1.0	<1.0	<1.0	<10
MW-3	11/13/19	NS	NS	NS	NS
MW-3	05/15/20	NS	NS	NS	NS
MW-3	11/14/20	NS	NS	NS	NS

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-3	05/22/21	<1.0	<1.0	<1.0	<10
MW-3	08/27/21	NS	NS	NS	NS
MW-3	11/14/21	NS	NS	NS	NS
MW-3	05/21/22	NS	NS	NS	NS
MW-3	05/18/23	<1.0	<1.0	<1.0	<10
MW-3	11/08/23	NS	NS	NS	NS
MW-4	06/10/17	2.8	<5.0	76	<5.0
MW-4	11/13/17	2.6	<1.0	60	<10
MW-4	05/17/18	1.3	<1.0	35	<10
MW-4	10/28/18	1.5	<1.0	31	<10
MW-4	05/23/19	<1.0	<1.0	2.1	<10
DUP-01(MW-4)*	05/23/19	<1.0	<1.0	1.3	<10
MW-4	11/13/19	<1.0	<1.0	2.7	<10
DUP-01(MW-4)*	11/13/19	<1.0	<1.0	2.7	<10
MW-4	05/15/20	<1.0	<1.0	<1.0	<10
MW-4	11/14/20	<1.0	<1.0	<1.0	<10
MW-4	05/22/21	<1.0	<1.0	<1.0	<10
MW-4	08/27/21	NS	NS	NS	NS
MW-4	11/14/21	<1.0	<1.0	<1.0	<10
MW-4	05/21/22	<1.0	<1.0	<1.0	<10
MW-4	05/18/23	<1.0	<1.0	<1.0	<10
MW-4	11/08/23	<1.0	<1.0	<1.0	<10
MW-5	06/10/17	24	<10	2.4	120
MW-5	11/13/17	24	<2.0	210	<20
MW-5	05/17/18	25	<2.0	280	<20
MW-5	10/28/18	25	<1.0	290	<10
DUP-01(MW-5)*	10/28/18	24	<1.0	260	<10
MW-5	05/23/19	24	<2.0	310	<20
MW-5	11/13/19	NS	NS	NS	NS
MW-5	05/15/20	NS	NS	NS	NS
MW-5	08/18/20	NS	NS	NS	NS
MW-5	11/14/20	NS	NS	NS	NS
MW-5	03/17/21	NS	NS	NS	NS
MW-5	05/22/21	NS	NS	NS	NS
MW-5	08/27/21	NS	NS	NS	NS
MW-5	11/14/21	NS	NS	NS	NS
MW-5	03/22/22	NS	NS	NS	NS
MW-5	05/21/22	NS	NS	NS	NS
MW-5	07/29/22	NS	NS	NS	NS

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-5	05/18/23	NS	NS	NS	NS
MW-5	11/08/23	NS	NS	NS	NS
MW-6	06/10/17	<1.0	<5.0	<1.0	<5.0
MW-6	11/13/17	<1.0	<1.0	<1.0	<10
MW-6	05/17/18	1.7	<1.0	<1.0	<10
MW-6	10/28/18	<1.0	<1.0	<1.0	<10
MW-6	05/23/19	<1.0	<1.0	<1.0	<10
MW-6	11/13/19	<1.0	<1.0	<1.0	<10
MW-6	05/15/20	<1.0	<1.0	<1.0	<10
MW-6	11/14/20	<1.0	1.2	<1.0	<10
MW-6	05/22/21	<1.0	<1.0	<1.0	<10
MW-6	08/27/21	NS	NS	NS	NS
MW-6	11/14/21	<1.0	<1.0	<1.0	<10
MW-6	05/21/22	<1.0	<1.0	<1.0	<10
MW-6	05/18/23	<1.0	<1.0	<1.0	<10
MW-6	11/08/23	NS	NS	NS	NS
MW-7	06/10/17	130	<10	150	580
MW-7	11/13/17	83	<1.0	110	96
MW-7	05/17/18	61	<1.0	89	21
DUP-01(MW-7)*	05/17/18	63	<1.0	97	23
MW-7	10/28/18	50	<1.0	58	<10
MW-7	05/23/19	53	<1.0	62	<10
MW-7	11/13/19	18	<1.0	24	<10
MW-7	05/15/20	12	<1.0	16	<10
MW-7	11/14/20	12	<1.0	17	<10
DUP-01(MW-7)*	11/14/20	14	<1.0	23	<10
MW-7	05/22/21	9.0	<1.0	9.0	<10
DUP-01(MW-7)*	05/22/21	9.1	<1.0	9.0	<10
MW-7	08/27/21	NS	NS	NS	NS
MW-7	11/14/21	8.7	<1.0	6.4	<10
MW-7	05/21/22	5.1	<1.0	1.9	<10
DUP-01(MW-7)*	05/21/22	4.6	<1.0	1.3	<10
MW-7	10/30/22	9.0	<1.0	2.1	<10
MW-7	05/18/23	8.3	<1.0	4.3	<10
MW-7	11/08/23	6.3	<1.0	1.0	<10
MW-8	10/28/18	1.7	<1.0	1.2	<10
MW-8	05/23/19	2.7	<1.0	1.1	<10
MW-8	11/13/19	1.8	<1.0	<1.0	<10

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS

Fogelson 4-1					
Location	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standards:		10	750	750	620
MW-8	05/15/20	<1.0	<1.0	<1.0	<10
MW-8	11/14/20	1.1	<1.0	<1.0	<10
MW-8	05/22/21	1.4	<1.0	3.0	<10
MW-8	08/27/21	NS	NS	NS	NS
MW-8	11/14/21	1.4	<1.0	<1.0	<10
MW-8	05/21/22	<1.0	<1.0	<1.0	<10
MW-8	05/18/23	<1.0	<1.0	<1.0	<10
MW-8	11/08/23	<1.0	<1.0	<1.0	<10
MW-9	10/28/18	<1.0	<1.0	<1.0	<10
MW-9	05/23/19	<1.0	<1.0	<1.0	<10
MW-9	11/13/19	<1.0	<1.0	<1.0	<10
MW-9	05/15/20	<1.0	<1.0	<1.0	<10
MW-9	11/14/20	<1.0	<1.0	<1.0	<10
MW-9	05/22/21	<1.0	<1.0	<1.0	<10
MW-9	08/27/21	NS	NS	NS	NS
MW-9	11/14/21	<1.0	<1.0	<1.0	<10
MW-9	05/21/22	<1.0	<1.0	<1.0	<10
MW-9	05/18/23	<1.0	<1.0	<1.0	<10
MW-9	11/08/23	<1.0	<1.0	<1.0	<10
MW-10	05/21/22	69	11	880	3100
MW-10	05/18/23	19	<1.0	510	370
DUP-01(MW-10)*	05/18/23	19	<1.0	520	380
MW-10	11/08/23	NS	NS	NS	NS
MW-11	05/18/23	<1.0	<1.0	<1.0	<10
MW-11	11/08/23	<1.0	<1.0	<1.0	<10

Notes:

NS = Not sampled

µg/L = micrograms per liter

Results highlighted yellow exceed their respective New Mexico Water Quality Control Commission (NMWQCC) standards.

"J" = Result is less than the reporting limit but greater than or equal to the method detection limit and the result is an approximate value.

<" = analyte was not detected at the indicated reporting limit (some historic data were reported at the detection limit).

*Field Duplicate results presented immediately below primary sample result

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	11/06/95	5784.77	NR	39.99		5744.78
MW-1	12/06/96	5784.77	NR	40.74		5744.03
MW-1	03/10/97	5784.77	NR	41.23		5743.54
MW-1	06/06/97	5784.77	NR	41.44		5743.33
MW-1	03/30/98	5784.77	NR	41.08		5743.69
MW-1	06/04/98	5784.77	NR	41.02		5743.75
MW-1	06/15/99	5784.77	NR	41.88		5742.89
MW-1	06/19/00	5784.77	NR	40.17		5744.60
MW-1	10/02/00	5784.77	NR	40.22		5744.55
MW-1	12/05/00	5784.77	NR	40.09		5744.68
MW-1	05/30/01	5784.77	NR	40.54		5744.23
MW-1	11/26/01	5784.77	NR	41.00		5743.77
MW-1	05/15/02	5784.77	NR	41.37		5743.40
MW-1	06/10/02	5784.77	NR	41.54		5743.23
MW-1	11/04/02	5784.77	NR	41.90		5742.88
MW-1	05/21/03	5784.77	ND	41.57		5743.20
MW-1	11/15/03	5784.77	ND	41.00		5743.77
MW-1	11/16/04	5784.77	ND	40.10		5744.67
MW-1	11/08/05	5784.77	ND	40.68		5744.09
MW-1	11/08/06	5784.77	ND	42.16		5742.61
MW-1	11/29/07	5784.77	ND	42.16		5742.61
MW-1	01/25/08	5784.77	43.00	43.10	0.10	5741.75
MW-1	08/12/08	5784.77	ND	43.14		5741.63
MW-1	11/07/08	5784.77	43.24	43.32	0.08	5741.51
MW-1	02/06/09	5784.77	ND	43.12		5741.65
MW-1	05/04/09	5784.77	ND	43.22		5741.55
MW-1	08/26/09	5784.77	43.46	43.53	0.07	5741.29
MW-1	11/03/09	5784.77	ND	43.52		5741.25
MW-1	02/11/10	5784.77	ND	43.64		5741.13
MW-1	05/25/10	5784.77	ND	43.75		5741.02
MW-1	09/24/10	5784.77	ND	43.95		5740.82
MW-1	11/09/10	5784.77	43.88	43.89	0.01	5740.89
MW-1	02/01/11	5784.77	ND	44.03		5740.74
MW-1	05/03/11	5784.77	ND	44.14		5740.63
MW-1	09/27/11	5784.77	ND	44.30		5740.47
MW-1	11/16/11	5784.77	ND	44.33		5740.44
MW-1	02/16/12	5784.77	ND	44.43		5740.34
MW-1	05/07/12	5784.77	ND	44.50		5740.27
MW-1	06/04/13	5784.77	ND	44.75		5740.02
MW-1	09/09/13	5784.77	ND	44.87		5739.90
MW-1	12/13/13	5784.77	ND	44.85		5739.92

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-1	04/05/14	5784.77	ND	44.75		5740.02
MW-1	10/21/14	5784.77	ND	44.86		5739.91
MW-1	05/30/15	5784.77	ND	44.81		5739.96
MW-1	11/18/15	5784.77	44.91	44.91	<0.01	5739.86
MW-1	04/16/16	5784.77	45.00	45.05	0.05	5739.76
MW-1	10/14/16	5784.77	45.12	45.12	<0.01	5739.65
MW-1	06/10/17	5784.77	45.25	45.30	0.05	5739.51
MW-1	11/13/17	5784.77	45.42	45.43	0.01	5739.35
MW-1	05/05/18	5784.77	ND	45.49		5739.28
MW-1	05/17/18	5784.77	45.48	45.48	<0.01	5739.29
MW-1 replaced with MW-1R on 9/28/2018						
MW-1R	10/28/18	5784.02	ND	48.27		5735.75
MW-1R	05/23/19	5784.02	ND	47.00		5737.02
MW-1R	11/13/19	5784.02	ND	47.32		5736.70
MW-1R	05/15/20	5784.02	ND	47.32		5736.70
MW-1R	08/18/20	5784.02	47.69	47.69		5736.33
MW-1R	11/14/20	5784.02	ND	47.45		5736.57
MW-1R	03/17/21	5784.02	ND	47.46		5736.56
MW-1R	05/22/21	5784.02	ND	47.56		5736.46
MW-1R	08/27/21	5784.02	ND	47.70		5736.32
MW-1R	11/14/21	5784.02	ND	47.84		5736.18
MW-1R	03/22/22	5784.02	ND	47.65		5736.37
MW-1R	05/21/22	5784.02	ND	47.70		5736.32
MW-1R	07/29/22	5784.02	ND	47.95		5736.07
MW-1R	10/30/22	5784.02	ND	47.99		5736.03
MW-1R	05/18/23	5784.02	ND	48.05		5735.97
MW-1R	08/31/23	5784.02	ND	48.12		5735.90
MW-1R	11/08/23	5784.02	ND	48.09		5735.93
MW-2	07/27/00	5780.03	NR	38.25		5741.78
MW-2	05/30/01	5780.03	NR	38.17		5741.86
MW-2	05/15/02	5780.03	NR	38.56		5741.47
MW-2	11/04/02	5780.03	NR	38.99		5741.05
MW-2	05/21/03	5780.03	ND	39.24		5740.79
MW-2	11/15/03	5780.03	ND	38.70		5741.34
MW-2	11/16/04	5780.03	ND	37.40		5742.63
MW-2	11/08/05	5780.03	ND	37.76		5742.27
MW-2	11/08/06	5780.03	ND	38.65		5741.38
MW-2	11/29/07	5780.03	ND	39.67		5740.36
MW-2	08/12/08	5780.03	ND	39.75		5740.28
MW-2	11/07/08	5780.03	ND	39.97		5740.06

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-2	02/06/09	5780.03	ND	39.73		5740.30
MW-2	05/04/09	5780.03	ND	39.83		5740.20
MW-2	08/26/09	5780.03	ND	40.19		5739.84
MW-2	11/03/09	5780.03	ND	40.32		5739.71
MW-2	02/11/10	5780.03	ND	40.17		5739.86
MW-2	05/25/10	5780.03	ND	40.40		5739.63
MW-2	09/24/10	5780.03	ND	40.74		5739.29
MW-2	11/09/10	5780.03	ND	40.35		5739.68
MW-2	02/01/11	5780.03	ND	40.39		5739.64
MW-2	05/03/11	5780.03	ND	40.96		5739.07
MW-2	09/27/11	5780.03	ND	41.05		5738.98
MW-2	11/16/11	5780.03	ND	41.07		5738.96
MW-2	02/16/12	5780.03	ND	41.15		5738.88
MW-2	05/07/12	5780.03	ND	41.15		5738.88
MW-2	06/04/13	5780.03	ND	41.54		5738.49
MW-2	09/09/13	5780.03	ND	41.64		5738.39
MW-2	12/13/13	5780.03	ND	41.66		5738.37
MW-2	04/05/14	5780.03	ND	41.64		5738.39
MW-2	10/21/14	5780.03	ND	41.93		5738.10
MW-2	05/30/15	5780.03	ND	42.10		5737.93
MW-2	11/18/15	5780.03	ND	42.03		5738.00
MW-2	04/16/16	5780.03	ND	42.01		5738.02
MW-2	10/14/16	5780.03	ND	42.38		5737.65
MW-2	06/10/17	5780.03	ND	42.08		5737.95
MW-2	11/13/17	5780.03	ND	42.24		5737.79
MW-2	05/17/18	5780.03	ND	42.12		5737.91
MW-2	10/28/18	5780.03	ND	42.51		5737.52
MW-2	05/23/19	5780.03	ND	42.31		5737.72
MW-2	11/13/19	5780.03	ND	42.58		5737.45
MW-2	05/15/20	5780.03	ND	42.64		5737.39
MW-2	11/14/20	5780.03	ND	42.78		5737.25
MW-2	05/22/21	5780.03	ND	42.90		5737.13
MW-2	08/27/21	5780.03	ND	42.99		5737.04
MW-2	11/14/21	5780.03	ND	43.11		5736.92
MW-2	05/21/22	5780.03	ND	43.07		5736.96
MW-2	10/30/22	5780.03	ND	43.18		5736.85
MW-2	05/18/23	5780.03	ND	43.23		5736.80
MW-2	11/08/23	5780.03	ND	43.39		5736.64
MW-3	07/27/00	5780.83	NR	41.21		5739.62
MW-3	05/30/01	5780.83	NR	40.77		5740.06
MW-3	05/15/02	5780.83	NR	41.14		5739.69

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-3	11/04/02	5780.83	NR	41.48		5739.35
MW-3	05/21/03	5780.83	ND	41.71		5739.12
MW-3	11/15/03	5780.83	ND	41.30		5739.53
MW-3	11/16/04	5780.83	ND	40.10		5740.73
MW-3	11/08/05	5780.83	ND	40.71		5740.12
MW-3	11/08/06	5780.83	ND	41.47		5739.36
MW-3	11/29/07	5780.83	43.01	43.10	0.09	5737.80
MW-3	08/12/08	5780.83	ND	42.47		5738.36
MW-3	11/07/08	5780.83	ND	42.69		5738.14
MW-3	02/06/09	5780.83	ND	42.47		5738.36
MW-3	05/04/09	5780.83	ND	42.50		5738.33
MW-3	08/26/09	5780.83	ND	42.90		5737.93
MW-3	11/03/09	5780.83	ND	43.03		5737.80
MW-3	02/11/10	5780.83	ND	42.79		5738.04
MW-3	05/25/10	5780.83	ND	42.97		5737.86
MW-3	09/24/10	5780.83	ND	43.25		5737.58
MW-3	11/09/10	5780.83	ND	42.97		5737.86
MW-3	02/01/11	5780.83	ND	42.82		5738.01
MW-3	05/03/11	5780.83	ND	43.41		5737.42
MW-3	09/27/11	5780.83	ND	43.40		5737.43
MW-3	11/16/11	5780.83	ND	43.36		5737.47
MW-3	02/16/12	5780.83	ND	43.41		5737.42
MW-3	05/07/12	5780.83	ND	43.46		5737.37
MW-3	06/04/13	5780.83	ND	43.82		5737.01
MW-3	09/09/13	5780.83	ND	43.93		5736.90
MW-3	12/13/13	5780.83	ND	43.93		5736.90
MW-3	04/05/14	5780.83	ND	43.88		5736.95
MW-3	10/21/14	5780.83	ND	44.16		5736.67
MW-3	05/30/15	5780.83	ND	44.31		5736.52
MW-3	11/18/15	5780.83	ND	44.18		5736.65
MW-3	04/16/16	5780.83	ND	44.10		5736.73
MW-3	10/14/16	5780.83	ND	44.58		5736.25
MW-3	06/10/17	5780.83	ND	44.25		5736.58
MW-3	11/13/17	5780.83	ND	44.44		5736.39
MW-3	05/17/18	5780.83	ND	44.32		5736.51
MW-3	10/28/18	5780.83	ND	44.67		5736.16
MW-3	05/23/19	5780.83	ND	44.37		5736.46
MW-3	11/13/19	5780.83	ND	44.70		5736.13
MW-3	05/15/20	5780.83	ND	44.72		5736.11
MW-3	11/14/20	5780.83	ND	44.85		5735.98
MW-3	05/22/21	5780.83	ND	45.09		5735.74

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-3	08/27/21	5780.83	ND	45.22		5735.61
MW-3	11/14/21	5780.83	ND	45.30		5735.53
MW-3	05/21/22	5780.83	ND	45.30		5735.53
MW-3	10/30/22	5780.83	ND	45.34		5735.49
MW-3	05/18/23	5780.83	ND	45.32		5735.51
MW-3	11/08/23	5780.83	ND	45.45		5735.38
MW-4	06/10/17	5782.14	ND	46.36		5735.78
MW-4	11/13/17	5782.14	ND	46.49		5735.65
MW-4	05/17/18	5782.14	ND	46.49		5735.65
MW-4	10/28/18	5782.14	ND	46.74		5735.40
MW-4	05/23/19	5782.14	ND	46.67		5735.47
MW-4	11/13/19	5782.14	ND	46.75		5735.39
MW-4	05/15/20	5782.14	ND	46.83		5735.31
MW-4	11/14/20	5782.14	ND	46.95		5735.19
MW-4	05/22/21	5782.14	ND	47.03		5735.11
MW-4	08/27/21	5782.14	ND	47.05		5735.09
MW-4	11/14/21	5782.14	ND	47.07		5735.07
MW-4	05/21/22	5782.14	ND	47.13		5735.01
MW-4	10/30/22	5782.14	ND	47.12		5735.02
MW-4	05/18/23	5782.14	ND	47.12		5735.02
MW-4	11/08/23	5782.14	ND	47.39		5734.75
MW-5	06/10/17	5780.92	ND	44.21		5736.71
MW-5	11/13/17	5780.92	ND	44.49		5736.43
MW-5	05/17/18	5780.92	ND	44.56		5736.36
MW-5	10/28/18	5780.92	ND	44.74		5736.18
MW-5	05/23/19	5780.92	ND	44.73		5736.19
MW-5	11/13/19	5780.92	44.87	44.99	0.12	5736.02
MW-5	05/15/20	5780.92	44.84	45.01	0.17	5736.04
MW-5	08/18/20	5780.92	46.03	46.08	0.05	5734.88
MW-5	11/14/20	5780.92	45.06	45.10	0.04	5735.85
MW-5	03/17/21	5780.92	44.87	45.05	0.18	5736.01
MW-5	05/22/21	5780.92	45.10	45.26	0.16	5735.78
MW-5	08/27/21	5780.92	45.11	45.35	0.24	5735.75
MW-5	11/14/21	5780.92	45.03	45.72	0.69	5735.72
MW-5	03/22/22	5780.92	44.94	45.96	1.02	5735.73
MW-5	05/21/22	5780.92	45.02	45.55	0.53	5735.77
MW-5	07/29/22	5780.92	45.02	45.81	0.79	5735.70
MW-5	10/30/22	5780.92	44.96	46.14	1.18	5735.67
MW-5	03/30/23	5780.92	44.95	46.20	1.25	5735.66
MW-5	05/18/23	5780.92	45.18	45.62	0.44	5735.63

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-5	08/31/23	5780.92	45.13	45.85	0.72	5735.61
MW-5	11/08/23	5780.92	45.20	45.83	0.63	5735.56
MW-6	06/10/17	5783.82	ND	47.78		5736.04
MW-6	11/13/17	5783.82	ND	48.03		5735.79
MW-6	05/17/18	5783.82	ND	47.85		5735.97
MW-6	10/28/18	5783.82	ND	48.11		5735.71
MW-6	05/23/19	5783.82	ND	47.48		5736.34
MW-6	11/13/19	5783.82	ND	47.92		5735.90
MW-6	05/15/20	5783.82	ND	47.85		5735.97
MW-6	11/14/20	5783.82	ND	47.94		5735.88
MW-6	05/22/21	5783.82	ND	48.06		5735.76
MW-6	08/27/21	5783.82	ND	48.20		5735.62
MW-6	11/14/21	5783.82	ND	48.37		5735.45
MW-6	05/21/22	5783.82	ND	48.19		5735.63
MW-6	10/30/22	5783.82	ND	48.38		5735.44
MW-6	05/18/23	5783.82	ND	48.43		5735.39
MW-6	11/08/23	5783.82	ND	48.49		5735.33
MW-7	06/10/17	5783.95	ND	43.89		5740.06
MW-7	11/13/17	5783.95	ND	44.09		5739.86
MW-7	05/17/18	5783.95	ND	44.12		5739.83
MW-7	10/28/18	5783.95	ND	44.30		5739.65
MW-7	05/23/19	5783.95	ND	44.33		5739.62
MW-7	11/13/19	5783.95	ND	44.51		5739.44
MW-7	05/15/20	5783.95	ND	44.60		5739.35
MW-7	11/14/20	5783.95	ND	44.76		5739.19
MW-7	05/22/21	5783.95	ND	44.84		5739.11
MW-7	08/27/21	5783.95	ND	44.90		5739.05
MW-7	11/14/21	5783.95	ND	44.96		5738.99
MW-7	05/21/22	5783.95	ND	45.00		5738.95
MW-7	10/30/22	5783.95	ND	45.14		5738.81
MW-7	05/18/23	5783.95	ND	45.22		5738.73
MW-7	11/08/23	5783.95	ND	45.37		5738.58
MW-8	10/28/18	5784.44	ND	43.30		5741.14
MW-8	05/23/19	5784.44	ND	42.65		5741.79
MW-8	11/13/19	5784.44	ND	42.65		5741.79
MW-8	05/15/20	5784.44	ND	42.54		5741.90
MW-8	11/14/20	5784.44	ND	42.88		5741.56
MW-8	05/22/21	5784.44	ND	44.05		5740.39
MW-8	08/27/21	5784.44	ND	44.22		5740.22
MW-8	11/14/21	5784.44	ND	44.51		5739.93

TABLE 3 - GROUNDWATER ELEVATION RESULTS

Fogelson 4-1						
Location	Date	TOC	Depth to LNAPL (ft.)	Depth to Water (ft.)	LNAPL Thickness (ft.)	GW Elevation (ft.)
MW-8	05/21/22	5784.44	ND	44.39		5740.05
MW-8	10/30/22	5784.44	ND	44.28		5740.16
MW-8	05/18/23	5784.44	ND	44.45		5739.99
MW-8	11/08/23	5784.44	ND	44.64		5739.80
MW-9	10/28/18	5784.19	ND	49.66		5734.53
MW-9	05/23/19	5784.19	ND	49.41		5734.78
MW-9	11/13/19	5784.19	ND	49.48		5734.71
MW-9	05/15/20	5784.19	ND	49.52		5734.67
MW-9	11/14/20	5784.19	ND	49.61		5734.58
MW-9	05/22/21	5784.19	ND	49.85		5734.34
MW-9	08/27/21	5784.19	ND	49.67		5734.52
MW-9	11/14/21	5784.19	ND	49.71		5734.48
MW-9	05/21/22	5784.19	ND	49.72		5734.47
MW-9	10/30/22	5784.19	ND	49.71		5734.48
MW-9	05/18/23	5784.19	ND	49.69		5734.50
MW-9	11/08/23	5784.19	ND	49.82		5734.37
MW-10	05/21/22	5783.11	ND	48.72		5734.39
MW-10	10/30/22	5783.11	ND	48.50		5734.61
MW-10	05/18/23	5783.11	ND	48.58		5734.53
MW-10	11/08/23	5783.11	48.78	48.68	0.10	5734.51
MW-11	10/30/22	5782.08	ND	57.33		5724.75
MW-11	05/18/23	5782.08	ND	50.18		5731.90
MW-11	11/08/23	5782.08	ND	50.16		5731.92

Notes:

"ft" = feet

"TOC" = Top of casing

"LNAPL" = light non-aqueous phase liquid

"ND" = LNAPL not detected

"NR" = LNAPL not recorded

Groundwater elevation = Top of Casing elevation (TOC, ft) - Depth to Water [ft] + (LPH thickness [ft] x 0.75). A specific gravity of 0.75 is within the range of gas condensate (<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/gas-condensate>)

FIGURES

FIGURE 1: SITE LOCATION

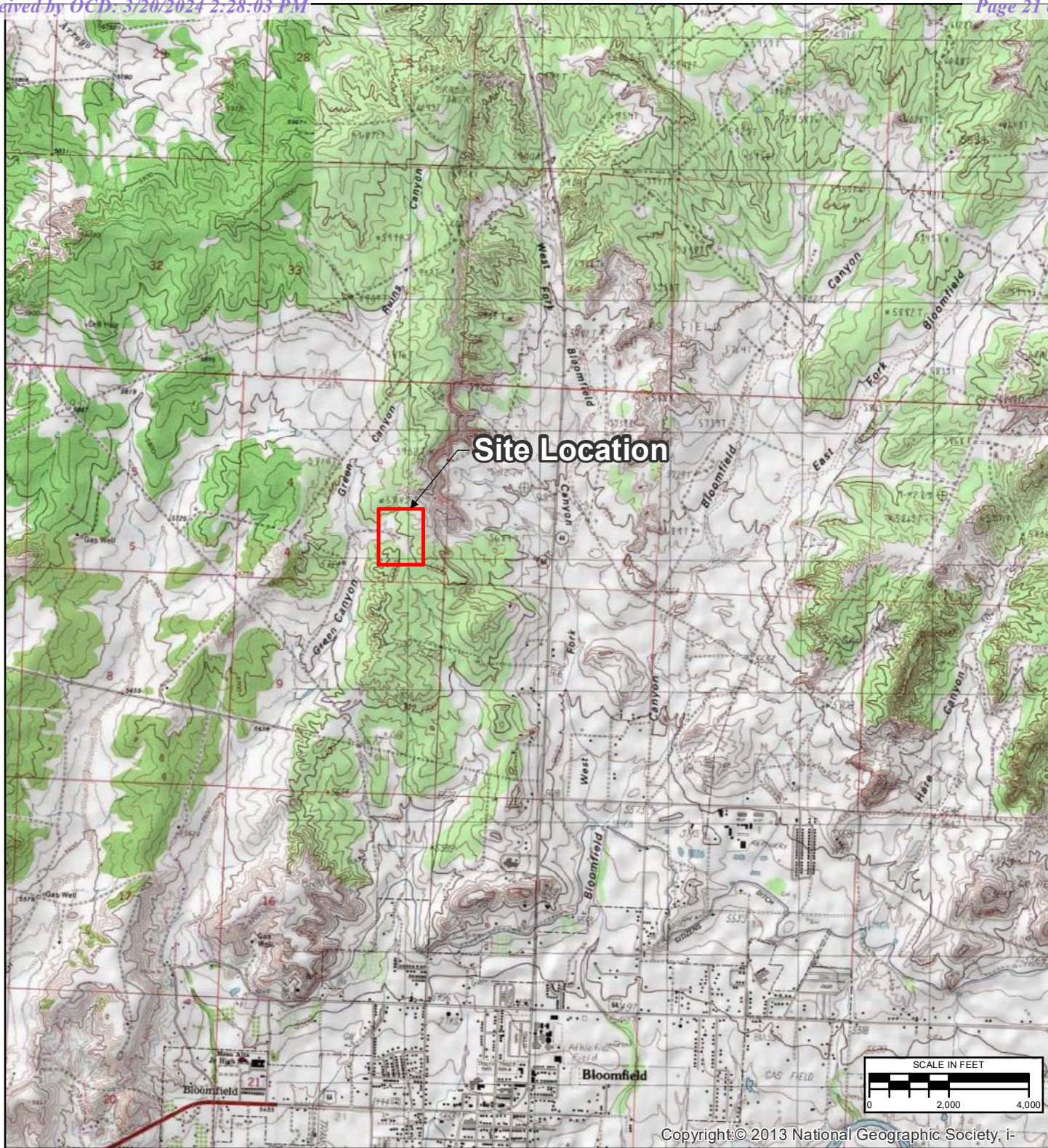
FIGURE 2: SITE PLAN

FIGURE 3: GROUNDWATER ANALYTICAL RESULTS – MAY 18, 2023

FIGURE 4: GROUNDWATER ELEVATION MAP – MAY 18, 2023

FIGURE 5: GROUNDWATER ANALYTICAL RESULTS – NOVEMBER 8, 2023

FIGURE 6: GROUNDWATER ELEVATION MAP – NOVEMBER 8, 2023



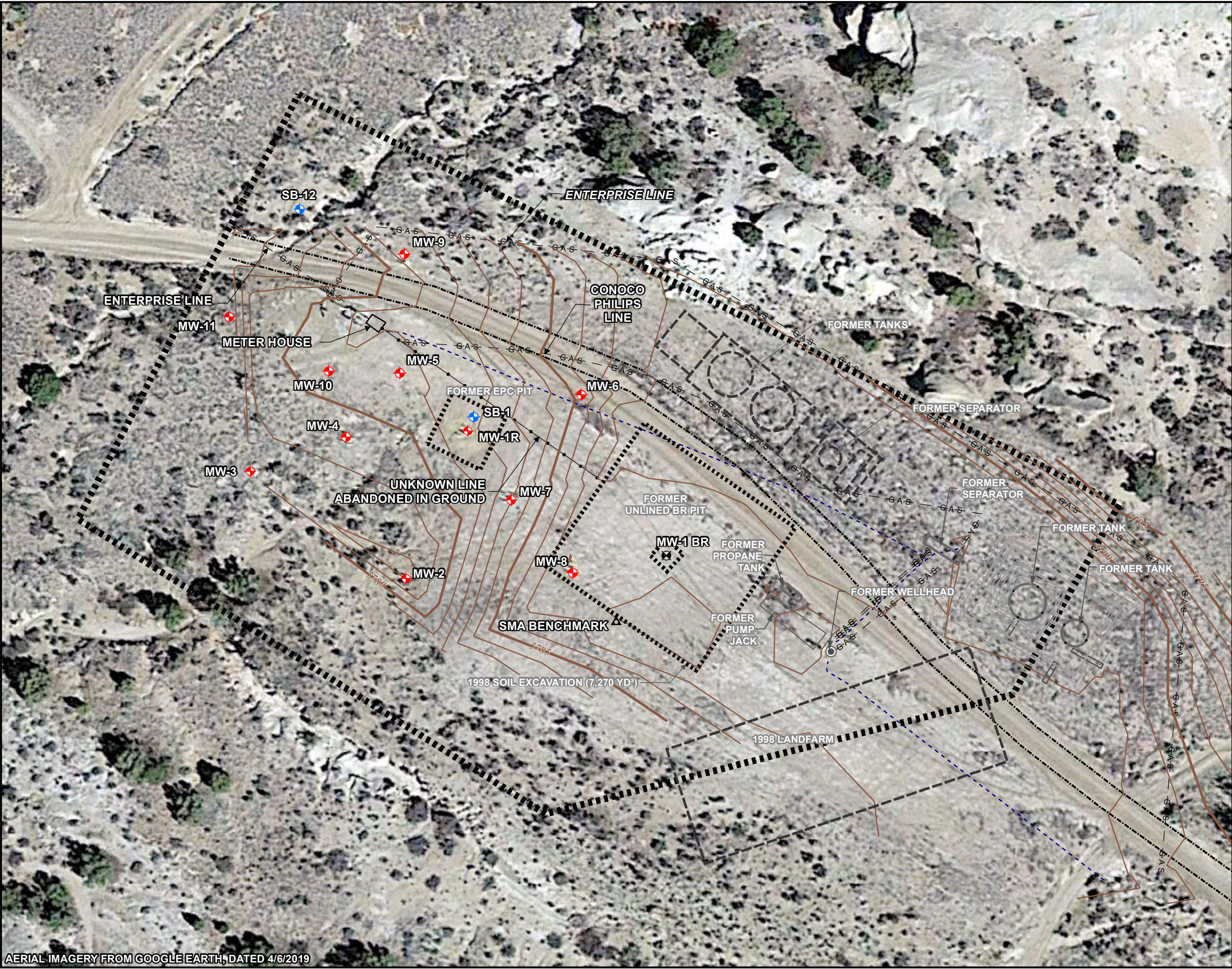
REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2/16/2021	SAH	SAH	SRV

TITLE	SITE LOCATION
PROJECT	FOGELSON 4-1 SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO



FIGURE
1

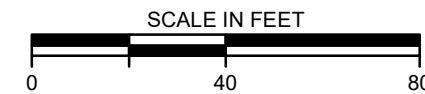
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AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

LEGEND:

- APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT OR EXCAVATION
- GAS LINE
- UNDERGROUND CABLE
- RIGHT OF WAY BOUNDARY
- MONITORING WELL
- SOIL BORING
- FORMER WELLHEAD
- SMA BENCHMARK
- FORMER MONITORING WELL (NOT EPCGP-OWNED)



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-28	SAH	SAH	SRV

TITLE:

SITE PLAN

PROJECT:

**FOGELSON 4-1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

2

\\cd1001-c200\CTX-CIFSS\VD\Redirect\shansen\Desktop\GIS-NEW\MXDs\FOGELSON 4-1 COM #14\2023 MAPS\Fogelson_GARM_1SA_2023.mxd



AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

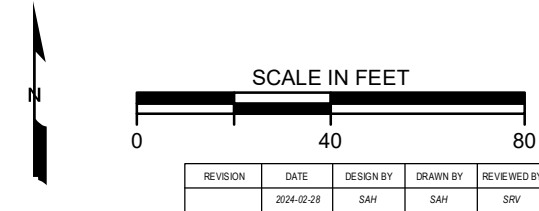
LEGEND:

- 5795 APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT OR EXCAVATION
- GAS GAS LINE
- UNDERGROUND CABLE
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- FORMER WELLHEAD
- SMA BENCHMARK
- FORMER MONITORING WELL (NOT EPCGP-OWNED)

NOTES:
DUP = FIELD DUPLICATE SAMPLE
LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
RESULTS IN **BOLDFACE/RED** TYPE INDICATE CONCENTRATION IN EXCESS OF THE STANDARD FOR THAT ANALYTE.
NS = NOT SAMPLED
µg/L = MICROGRAMS PER LITER
<1 = BELOW REPORTING LIMIT

ANALYTE	NMWQCC STANDARDS
B = Benzene	10 µg/L
T = Toluene	750 µg/L
E = Ethylbenzene	750 µg/L
X = Total Xylenes	620 µg/L



REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-28	SAH	SAH	SRV

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
MAY 18, 2023**

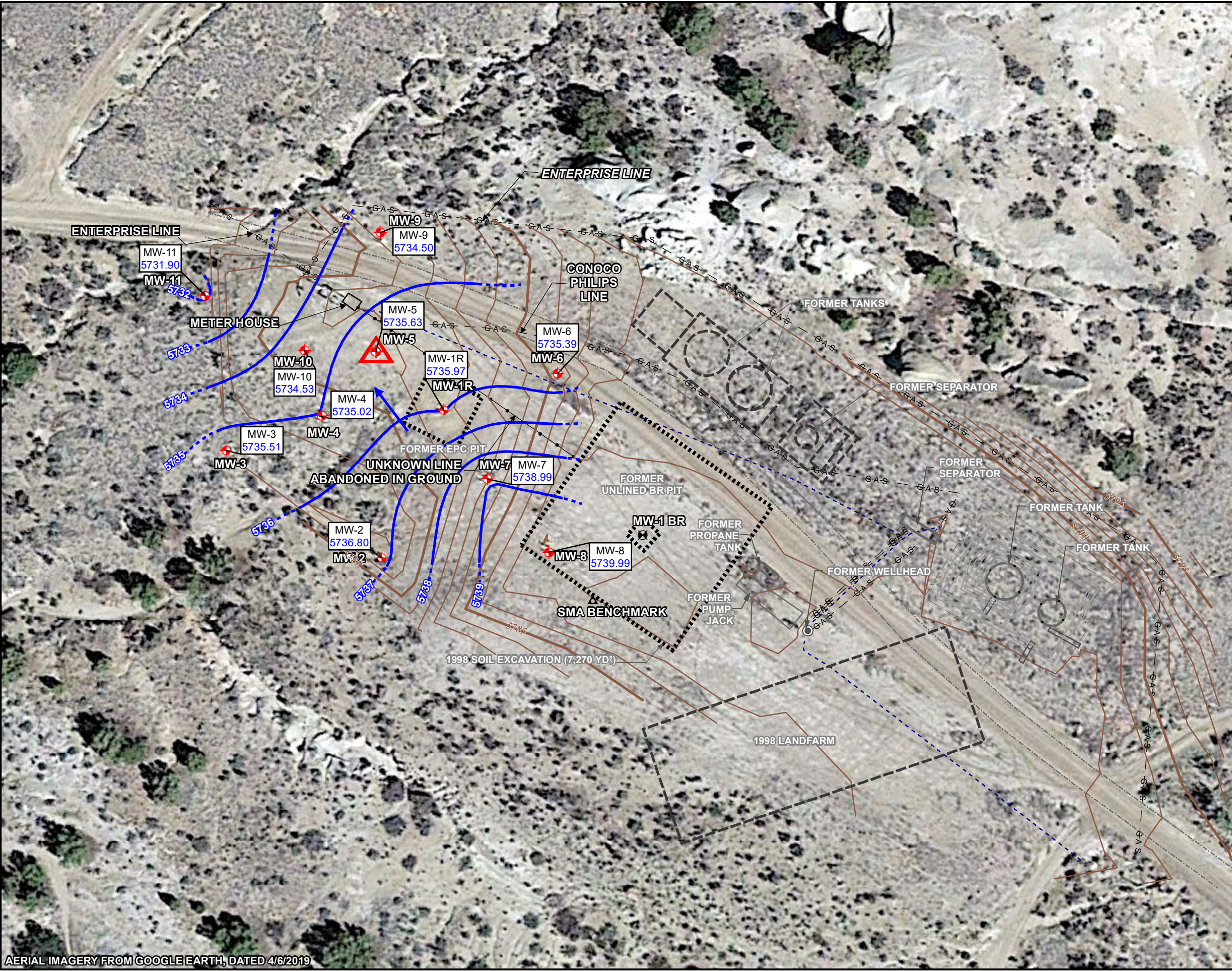
PROJECT: **FOGELSON 4-1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

3

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AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

LEGEND:

- APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT OR EXCAVATION
- GAS LINE
- UNDERGROUND CABLE
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
- FORMER WELLHEAD
- SMA BENCHMARK
- FORMER MONITORING WELL (NOT EPCGP-OWNED)

NOTES:

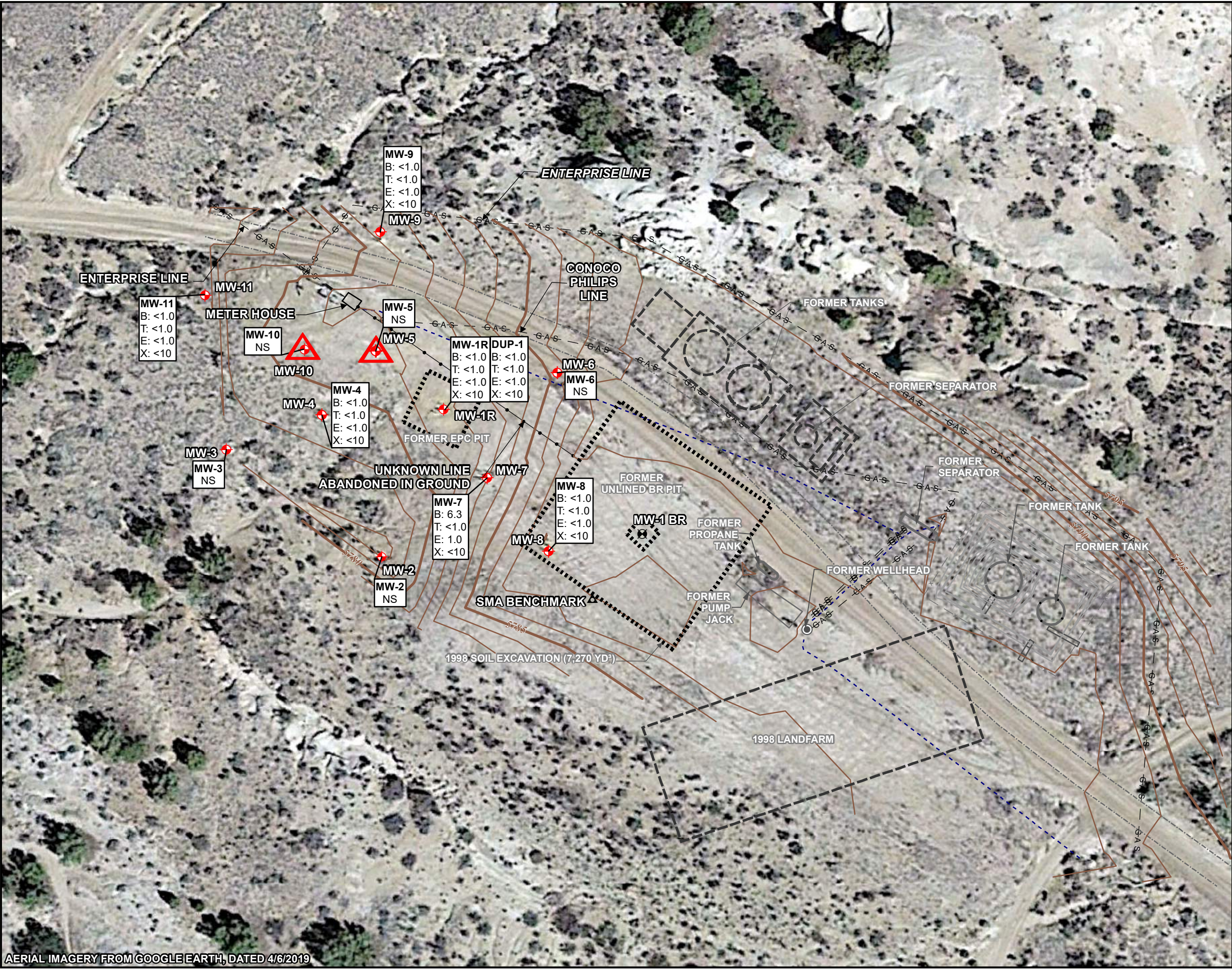
- GROUNDWATER ELEVATION CORRECTED FOR LNAPL THICKNESS. FEET ABOVE MEAN SEA LEVEL
 - CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
 - DIRECTION OF APPARENT GROUNDWATER FLOW
- LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

SCALE IN FEET
0 40 80

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-28	SAH	SAH	SRV

TITLE: GROUNDWATER ELEVATION MAP MAY 18, 2023	
PROJECT: FOGELSON 4-1 SAN JUAN RIVER BASIN SAN JUAN COUNTY, NEW MEXICO	
	Figure No.: 4

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AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

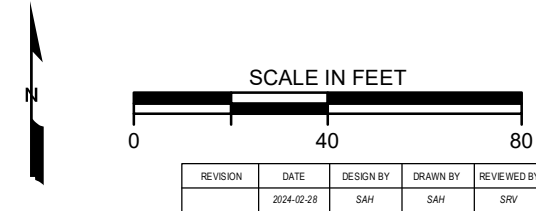
LEGEND:

- 5795 APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT OR EXCAVATION
- GAS GAS LINE
- UNDERGROUND CABLE
- MONITORING WELL
- MONITORING WELL WITH MEASURABLE LNAPL
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EXPLANATION OF ANALYTES AND APPLICABLE STANDARDS:
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<1 = BELOW REPORTING LIMIT

ANALYTE	NMWQCC STANDARDS
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T = Toluene	750 µg/L
E = Ethylbenzene	750 µg/L
X = Total Xylenes	620 µg/L



TITLE:
**GROUNDWATER ANALYTICAL RESULTS
NOVEMBER 8, 2023**

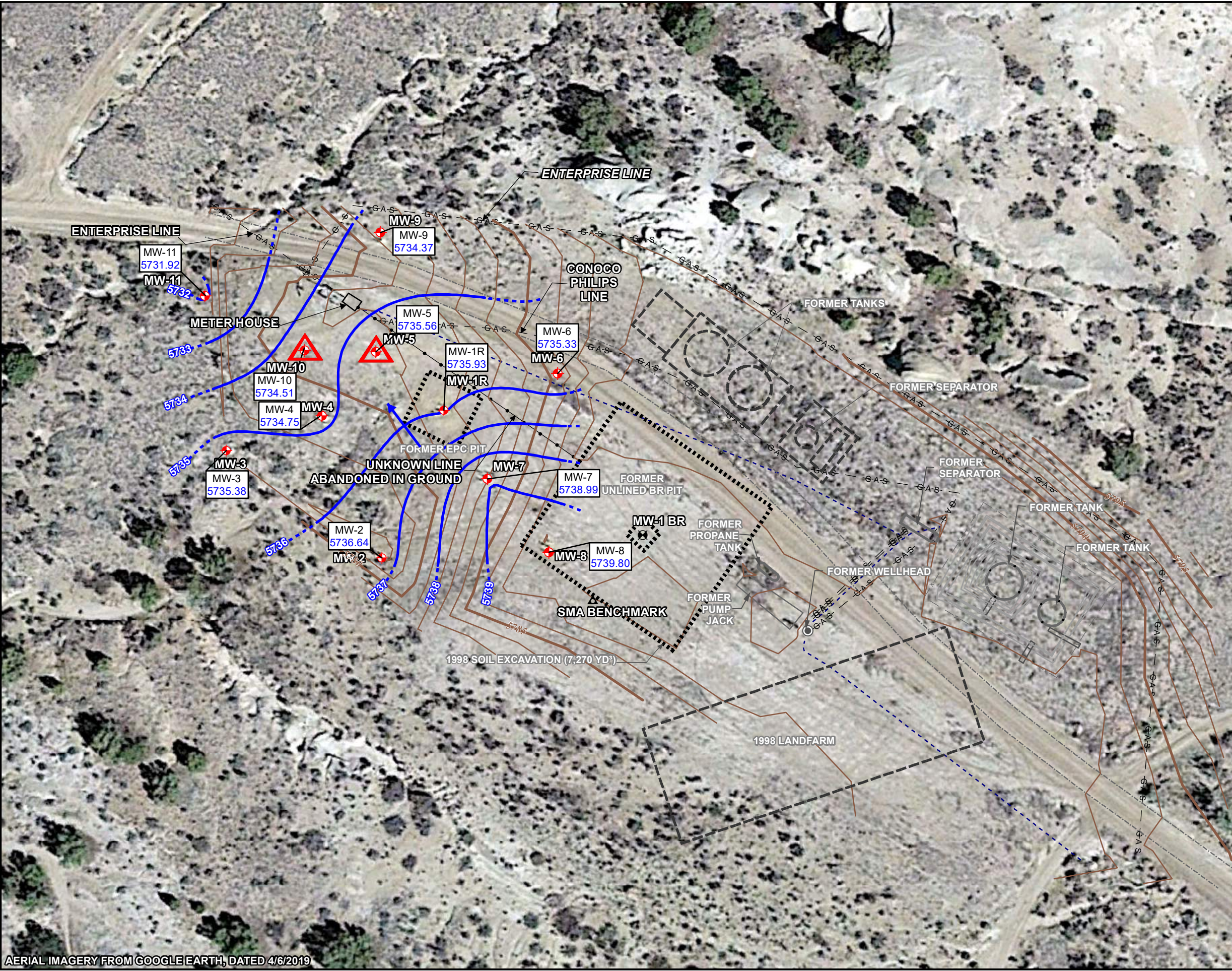
PROJECT: **FOGELSON 4-1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO**



Figure No.:

5

\\cd1001-c200\CTX-CIFSS\VD\Redirect\shansen\Desktop\GIS-NEW\MXDs\FOGELSON 4-1 COM #14\2023 MAPS\Fogelson_GECM_2SA_2023.mxd



AERIAL IMAGERY FROM GOOGLE EARTH, DATED 4/6/2019

LEGEND:

- APPROX. GROUND SURFACE CONTOUR AND ELEVATION, FEET
- ACCESS ROAD
- FORMER PIT OR EXCAVATION
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- MONITORING WELL
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NOTES:

- GROUNDWATER ELEVATION CORRECTED FOR LNAPL THICKNESS. FEET ABOVE MEAN SEA LEVEL
 - CORRECTED WATER LEVEL ELEVATION CONTOUR DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
 - DIRECTION OF APPARENT GROUNDWATER FLOW
- LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID

SCALE IN FEET

REVISION	DATE	DESIGN BY	DRAWN BY	REVIEWED BY
	2024-02-28	SAH	SAH	SRV

TITLE:

GROUNDWATER ELEVATION MAP
NOVEMBER 8, 2023

PROJECT:

FOGELSON 4-1
SAN JUAN RIVER BASIN
SAN JUAN COUNTY, NEW MEXICO

Figure No.:
6

APPENDICES

APPENDIX A – SITE HISTORY

APPENDIX B – NMOCD NOTIFICATION OF SITE ACTIVITIES

APPENDIX C – WASTE DISPOSAL DOCUMENTATION

APPENDIX D – GROUNDWATER ANALYTICAL LAB REPORTS

APPENDIX A

Site History

**Fogelson 4-1
Site History**

San Juan River Basin, New Mexico

<i>Date</i>	<i>Source (Regulatory File #)</i>	<i>Event/Action</i>	<i>Description/Comments</i>
1/1962	API # 30-045-08664	Sundry Notices on Well	Drill rig released 12/5/1961.
2/2/1962	API # 30-045-08664	Log of Oil or Gas Well	Drilling ended 12/5/1961. International Oil Company is owner.
11/13/1970	API # 30-045-08664	Sundry Notice	Well operator listed as Beta Development Company
12/22/1988	API # 30-045-08664	Request for Allowable and Authorization to Transport	Well operator is Meridian Oil Company
9/16/1995	Unknown	EPFS Remediation Plan for Groundwater Encountered During Pit Closure Activities to NMOCD	Outlines approach to investigating and remediating soil and groundwater at closed pit sites.
11/29/1995	Unknown	EPFS Addendum to the Remediation Plan for Groundwater Encountered During Pit Closure Activities to NMOCD	Amends work plan for include installation of additional wells for delienation, define groundwater sampling parameters, and release closure following four consecutive quarters of results below NMWQCC standards.
11/30/1995	Unknown	NMOCD approval of the Remediation Plan with conditions	Approval of Remediation Plan and Addendum.
7/11/1996	API # 30-045-08664	Request for Allowable and Authorization to Transport	Well operator is Burlington Resources
6/2/1997	Missing from NMOCD files	Letter from EPFS to NMOCD	Groundwater encountered in exempt hydrocarbon unlined pits. Depth to water 21.8-28.8 feet at site. EPFS requests to submit annual reports.
8/6/1997	Missing from NMOCD files	NMOCD approval letter for the 6/2/1997 Semiannual Groundwater Report (EPFS)	Approval of semi-annual report.
2/27/1998	nAUTOAB000193 (Case # 3RP-174)	Semi-annual EPFS Pit Projects Groundwater Report	Lists pits where groundwater was encountered.

**Fogelson 4-1
Site History**

San Juan River Basin, New Mexico

7/8/1998	nAUTOfAB000193 (Case # 3RP-174)	NMOCD review letter	Approves modifying reporting schedule from semi-annual to annual basis
7/9/1998	nAUTOfAB000192 (Case # 3RP-68)	Letter from NMOCD to Burlington Resources	NMOCD requires BR begin implementation of their previously approved pit closure plan at the sites listed below.
9/10/1998	nAUTOfAB000192 (Case # 3RP-68)	Letter from NMOCD to BR	NMOCD approved Groundwater Remediation Work Plan
11/10/1998	nAUTOfAB000192 (Case # 3RP-68)	Report of Environmental Cleanup Excavation from Agra Earth and Environmental to Phillip Environmental Services	11/1998 excavation of Burlington Resources pit.
3/31/1999	nAUTOfAB000193 (Case # 3RP-174)	Philip Environmental 1998 Annual Report (for EPFS)	Quarterly groundwater sampling.
7/30/1999	nAUTOfAB000192 (Case # 3RP-68)	BR letter to NMOCD (Notification of Groundwater Above Chloride Standard)	MW-1 installed in the former pit in May 1999. BR proposed to install a temporary MW upgradient of operations at the site.
9/16/1999	nAUTOfAB000192 (Case # 3RP-68)	Letter from NMOCD to BR	NMOCD reviewed BR's 7/30/1999 Notification and Work Plan.
3/24/2000	nAUTOfAB000193 (Case # 3RP-174)	Philip Environmental 1999 Annual Report (for EPFS)	Summarizes pit closure, monitoring well MW-1 and piezometer installation, and groundwater sampling activities.
3/29/2000	nAUTOfAB000192 (Case # 3RP-68)	BR letter and 1999 Annual Report	upgradient monitoring well installation unsuccessful (auger refusal).
2/26/2001	nAUTOfAB000193 (Case # 3RP-174)	Philip Environmental 2000 Annual Report (for EPFS)	Additional monitoring wells MW-2 and MW-3 were installed. Quarterly groundwater sampling.
3/27/2001	nAUTOfAB000192 (Case # 3RP-68)	BR letter and 2000 Annual Report	BR collected GW samples for six quarters.
7/18/2001	nAUTOfAB000193 (Case # 3RP-174)	NMOCD Review letter for 2000 Annual Groundwater Monitoring Report	NMOCD requests that EPFS work cooperatively with the operator to investigate and remediate contaminated groundwater.
2/28/2002	nAUTOfAB000193 (Case # 3RP-174)	MWH 2001 Annual Report (for EPFS)	Annual and semi-annual groundwater sampling. ORC socks installed in MW-1 to oxygenate the source area.
2/28/2003	nAUTOfAB000193 (Case # 3RP-174)	MWH 2002 Annual Report (for EPFS)	Semi-annual groundwater sampling.

**Fogelson 4-1
Site History**

San Juan River Basin, New Mexico

2/26/2004	nAUTOfAB000193 (Case # 3RP-174)	MWH 2003 Annual Report (for EPFS)	Semi-annual groundwater monitoring.
2/21/2005	nAUTOfAB000192 (Case # 3RP-68)	MWH 2004 Annual Groundwater Report (for EPTPC)	Annual groundwater monitoring.
3/2/2006	nAUTOfAB000192 (Case # 3RP-68)	MWH 2005 Annual Groundwater Report (for EPTPC)	Annual groundwater monitoring.
2/16/2007	nAUTOfAB000192 (Case # 3RP-68)	MWH 2006 Annual Report (for EPTPC)	Annual groundwater monitoring.
4/2/2008	nAUTOfAB000192 (Case # 3RP-68)	MWH 2007 Annual Groundwater Report (for EPTPC)	LNAPL detected in MW-1. Absorbent sock installed in MW-1
2/28/2009	nAUTOfAB000192 (Case # 3RP-68)	MWH 2008 Annual Groundwater Report (for EPTPC)	LNAPL recovery & groundwater monitoring
4/16/2010	nAUTOfAB000192 (Case # 3RP-68)	MWH 2009 Annual Report (for EPTPC)	Annual groundwater sampling. Quarterly LNAPL recovery at MW-1.
3/2/2011	nAUTOfAB000192 (Case # 3RP-68)	MWH 2010 Annual Report (for EPTPC)	Annual groundwater sampling. Quarterly LNAPL recovery at MW-1.
4/11/2011	API # 30-045-08664	Application for Closure of a Pit	Above ground steel tank closed 3/28/2011.
8/16/2012	nAUTOfAB000192 (Case # 3RP-68)	MWH 2011 Annual Report - Pit Groundwater Remediation (for EPCGP)	Annual groundwater sampling and quarterly LNAPL recovery.
2/24/2014	API # 30-045-08664	Sundry Notice	Submission was a subsequent report for plug and abandon. Production well was P/A 1/30/2014.
3/4/2014	nAUTOfAB000192 (Case # 3RP-68)	MWH 2013 Annual Groundwater Report (for EPCGP)	Groundwater monitoring activities.
5/28/2014	nAUTOfAB000192 (Case # 3RP-68)	MWH 2014 Monitoring Well Installation Work Plan (for EPCGP)	Four additional monitoring wells proposed.
2/2/2015	nAUTOfAB000192 (Case # 3RP-68)	MWH 2014 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater monitoring. Update on BLM ROW permits for monitoring well installations.

**Fogelson 4-1
Site History**

San Juan River Basin, New Mexico

2/11/2016	Not in NMOCD files	MWH 2015 Annual Groundwater Report (for EPCGP)	semi-annual groundwater sampling and LNAPL recovery.
4/21/2016	API # 30-045-08664	Sundry Notice	Burlington Resources completed the final reclamation on 1/18/2016 w/seeding completed on 2/22/2016.
3/20/2017	nAUTOfAB000192 (Case # 3RP-68)	Stantec 2016 Annual Groundwater Report (for EPCGP)	Annual groundwater monitoring activities. LNAPL detected at MW-1. Installation of additional monitoring wells is planned, after establishment of a right-of-way with BLM.
3/15/2017	nAUTOfAB000192 (Case # 3RP-68)	Stantec 2017 Monitoring Well Installation Work Plan (for EPCGP)	Work Plan replaces the monitoring well installation work plan dated May 28, 2014, which was not implemented.
6/2/2017	nAUTOfAB000192 (Case # 3RP-68)	Letter from NMOCD to EPCGP.	Remediation plan requested.
7/19/2017	nAUTOfAB000192 (Case # 3RP-68)	Response letter from EPCGP to NMOCD	Additional groundwater monitoring is planned in 2017.
3/28/2018	nAUTOfAB000192 (Case # 3RP-68)	Stantec 2017 Annual Groundwater Report (for EPCGP)	Monitoring wells MW-4 through MW-7 installed, soil boring SB-1 advanced in the former pit, semi-annual groundwater sampling.
3/28/2019	Not in NMOCD files	Stantec 2018 Annual Groundwater Report (for EPCGP)	MDPE event conducted at MW-1. Two new monitoring wells installed (MW-8 and MW-9). Semi-annual groundwater monitoring activities.
4/1/2020	Not in NMOCD files	Stantec 2019 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater monitoring activities and LNAPL recovery.
1/5/2021	Not in NMOCD files	Letter from EPCGP to NMOCD	Work Plan for MDPE activities for LNAPL recovery.
4/8/2021	nAUTOfAB000192	Stantec 2020 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater monitoring. Quarterly LNAPL recovery.
8/19/2021	nAUTOfAB000192	Stantec LNAPL Recovery Work Plan	MDPE activities proposed at monitoring well MW-5, where measurable LNAPL is present.
3/30/2022	nAUTOfAB000192	Stantec 2021 Annual Groundwater Report (for EPCGP)	Semi-annual groundwater monitoring activities. MDPE event at MW-5.

**Fogelson 4-1
Site History****San Juan River Basin, New Mexico**

3/22/2022	nAUTOfAB000192	Stantec Monitoring Well Installation Activities Work Plan	Work Plan proposed the installation of one monitoring well, MW-10, at the Site.
9/27/2022	nAUTOfAB000192	Stantec Additional Monitoring Well Installation Activities Work Plan	Work Plan proposed methodology for installation of two monitoring wells; MW-11 and MW-12.
3/22/2023	nAUTOfAB000192	Stantec 2022 Annual Groundwater Report	Three new monitoring wells installed (MW-10, MW-11, MW-12) and SB-13 advanced. Semi-annual groundwater monitoring activities. Quarterly LNAPL recovery.

APPENDIX B

NMOCD Notification of Site Activities

From: [Mitch Killough](#)
To: [Varsa, Steve](#); [Clara Cardoza](#)
Subject: RE: [EXTERNAL] Notice of upcoming El Paso CGP work
Date: Thursday, August 17, 2023 3:12:37 PM

Hi Steve. I let the Area foremen know. Thanks for the heads up.

Mitch Killough
Hilcorp Energy Company
713-757-5247 (Office)
281-851-2338 (Mobile)

From: Varsa, Steve <steve.varsa@stantec.com>
Sent: Wednesday, August 16, 2023 7:17 PM
To: Mitch Killough <mkillough@hilcorp.com>; Clara Cardoza <ccardoza@hilcorp.com>
Subject: [EXTERNAL] Notice of upcoming El Paso CGP work

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Hi Mitch and Carla – just a heads-up that we will be doing activities at the following sites:

Fogelson #4-1 – routine free product recovery: 8/31/2023
James F. Bell #1E – mobile dual-phase extraction: 8/23, 24, and 25/2023
Johnston Federal #4 – routine free product recovery: 8/30/2023
Johnston Federal #6A – routine groundwater sampling: 8/30/2023
State Gas Com N#1 – routine free product recovery: 8/29/2023

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: nelson.valez@state.nm.us
Cc: [Bratcher, Mike, EMNRD](#); [Wiley, Joe](#)
Bcc: [Varsa, Steve](#)
Subject: El Paso CGP Company - Notice of upcoming product recovery activities
Date: Wednesday, August 16, 2023 1:56:00 PM

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming quarterly product recovery activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	8/27/2023
Fields A#7A	nAUTOfAB000176	8/30/2023
Fogelson 4-1	nAUTOfAB000192	8/31/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	8/31/2023
James F. Bell #1E	nAUTOfAB000291	8/25/2023
Johnston Fed #4	nAUTOfAB000305	8/30/2023
K27 LDO72	nAUTOfAB000316	8/31/2023
State Gas Com N #1	nAUTOfAB000668	8/29/2023

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: [Mitch Killough](#); ccardoza@hilcorp.com
Subject: Notice of upcoming El Paso CGP work
Date: Wednesday, March 22, 2023 10:17:39 PM

Hi Mitch and Carla – just a heads up that we will be doing routine gauging and product recovery and/or groundwater sampling activities at the following sites:

Fogelson #4-1: 3/29/2023
James F. Bell #1E: 3/29/2023
Johnston Federal #4: 3/30/2023
Johnston Federal #6A: 3/30/2023
State Gas Com N#1: 3/29/2023

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: nelson.valez@state.nm.us
Subject: FW: El Paso CGP Company - Notice of upcoming product recovery activities
Date: Wednesday, March 22, 2023 9:51:09 PM

From: Varsa, Steve <steve.varsa@stantec.com>
Sent: Wednesday, March 22, 2023 9:33 PM
To: nelson.valez@state.nm
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Wiley, Joe <joe_wiley@kindermorgan.com>
Subject: El Paso CGP Company - Notice of upcoming product recovery activities

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming quarterly product recovery activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	3/28/2023
Fields A#7A	nAUTOfAB000176	3/29/2023
Fogelson 4-1	nAUTOfAB000192	3/29/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	3/28/2023
James F. Bell #1E	nAUTOfAB000291	3/29/2023
Johnston Fed #4	nAUTOfAB000305	3/30/2023
K27 LDO72	nAUTOfAB000316	3/28/2023
Lateral L-40	nAUTOfAB000335	3/29/2023
State Gas Com N #1	nAUTOfAB000668	3/29/2023

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
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From: [Varsa, Steve](#)
To: [Mitch Killough](#); ccardoza@hilcorp.com
Subject: Notice of upcoming El Paso CGP work
Date: Friday, May 12, 2023 10:52:01 PM

Hi Mitch and Carla – just a heads up that we will be doing routine groundwater sampling activities at the following sites:

Fogelson #4-1: 5/18/2023
James F. Bell #1E: 5/18/2023
Johnston Federal #4: 5/19/2023
Johnston Federal #6A: 5/19/2023
Standard Oil Com #1: 5/20/2023
State Gas Com N#1: 5/22/2023

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
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steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: nelson.valez@state.nm.us
Cc: [Bratcher, Mike, EMNRD](#); [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Friday, May 12, 2023 9:54:16 PM

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming semi-annual groundwater sampling and monitoring activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOAB000065	5/20/2023
Fields A#7A	nAUTOAB000176	5/21/2023
Fogelson 4-1	nAUTOAB000192	5/18/2023
Gallegos Canyon Unit #124E	nAUTOAB000205	5/17/2023
GCU Com A #142E	nAUTOAB000219	5/21/2023
James F. Bell #1E	nAUTOAB000291	5/18/2023
Johnston Fed #4	nAUTOAB000305	5/19/2023
Johnston Fed #6A	nAUTOAB000309	5/19/2023
K27 LDO72	nAUTOAB000316	5/20/2023
Knight #1	nAUTOAB000324	5/17/2023
Lateral L 40 Line Drip	nAUTOAB000335	5/21/2023
Sandoval GC A #1A	nAUTOAB000635	5/19/2023
Standard Oil Com #1	nAUTOAB000666	5/20/2023
State Gas Com N #1	nAUTOAB000668	5/22/2023

We also plan to conduct quarterly operation and maintenance activities on the Knight #1 air sparge/soil vapor extraction system (Incident number nAUTOAB000324) on Wednesday, May 17, 2023.

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: [Mitch Killough](#); ccardoza@hilcorp.com
Subject: Notice of upcoming El Paso CGP work
Date: Thursday, November 2, 2023 6:45:57 AM

Hi Mitch and Carla – just a heads up that we will be doing routine groundwater sampling activities at the following sites:

Fogelson #4-1: 11/8/2023
James F. Bell #1E: 11/15/2023
Johnston Federal #4: 11/11/2023
Johnston Federal #6A: 11/11/2023
Standard Oil Com #1: 11/12/2023
State Gas Com N#1: 11/10/2023

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
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steve.varsa@stantec.com

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From: [Varsa, Steve](#)
To: nelson.valez@state.nm.us
Cc: [Bratcher, Mike, EMNRD](#); [Wiley, Joe](#)
Subject: El Paso CGP Company - Notice of upcoming groundwater sampling activities
Date: Thursday, November 2, 2023 6:17:33 AM

Hi Nelson -

This correspondence is to provide notice to the NMOCD of upcoming semi-annual groundwater sampling and monitoring activities at the following EPCGP project sites:

Site Name	Incident Number	Sample Date
Canada Mesa #2	nAUTOfAB000065	11/12/2023
Fields A#7A	nAUTOfAB000176	11/15/2023
Fogelson 4-1	nAUTOfAB000192	11/8/2023
Gallegos Canyon Unit #124E	nAUTOfAB000205	11/9/2023
GCU Com A #142E	nAUTOfAB000219	11/9/2023
James F. Bell #1E	nAUTOfAB000291	11/15/2023
Johnston Fed #4	nAUTOfAB000305	11/11/2023
Johnston Fed #6A	nAUTOfAB000309	11/11/2023
K27 LDO72	nAUTOfAB000316	11/12/2023
Knight #1	nAUTOfAB000324	11/7/2023
Lateral L 40 Line Drip	nAUTOfAB000335	11/16/2023
Sandoval GC A #1A	nAUTOfAB000635	11/11/2023
Standard Oil Com #1	nAUTOfAB000666	11/12/2023
State Gas Com N #1	nAUTOfAB000668	11/10/2023

We also plan to conduct quarterly operation and maintenance activities on the Knight #1 air sparge/soil vapor extraction system (Incident number nAUTOAB000324) on Tuesday, November 7, 2023.

Please feel free to contact Joe Wiley, Project Manager at EPCGP, or me, if you need further information.

Thank you,
Steve

Stephen Varsa, P.G., R.G.
Principal Hydrogeologist
Stantec Environmental Services
11311 Aurora Avenue
Des Moines, Iowa 50322
Direct: (515) 251-1020
Cell: (515) 710-7523
Office: (515) 253-0830
steve.varsa@stantec.com

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APPENDIX C

Waste Disposal Documentation



Bill of Lading

MANIFEST # 79427
GENERATOR Kinder Morgan
POINT OF ORIGIN Bio Vista Camp Station
TRANSPORTER Envirotech *
DATE 5/22/2003 JOB # 14073-0073

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

[illegible]

Generator Onsite Contact Sean Cleary

Phone (515) 557-0109

Signatures required prior to distribution of the legal document.

DISTRIBUTION: **White** - Company Records / Billing **Yellow** - Customer **Pink** - LF Copy

BOL# 79427

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 5/22/2023 TIME 1550 Attach test strip here

CUSTOMER

Kinder Morgan

SITE

Bio Vista Comp Station *St. River Plant
Blanco N. Plant
Numerous Pit
sites*

DRIVER

[Signature]

SAMPLE

Soil Straight With Dirt ✓

CHLORIDE TEST

-281 mg/Kg

ACCEPTED

YES ✓ NO

PAINT FILTER TEST

Time started 1550 Time completed 1600

PASS

YES ✓ NO

SAMPLER/ANALYST

[Signature]

5796 US Hwy 64, Farmington, NM 87401 || Ph (505) 632-0615 / Fr (800) 362-1879 Fx (505) 632-1865 || info@envirotech-inc.com envirotech-inc.com



envirotech

Bill of Lading

MANIFEST # 78476

GENERATOR Kinder Morgan

POINT OF ORIGIN EL PASO pit sites

TRANSPORTER Envirotech

DATE 03/31/23 JOB # 14073-0073

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY				
	DESTINATION	MATERIAL	GRID	YDS	BBLs	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE	
1	BF	Tank bottoms			1 <div style="color:red;">1</div>			991	1130	by Gary R	
RESULTS							NOTES				
-281	CHLORIDE TEST	1	LANDFARM EMPLOYEE <i>Gary Palmeron</i>								
	CHLORIDE TEST		<input type="checkbox"/> Soil w/ Debris <input type="checkbox"/> After Hours/Weekend Reveal <input type="checkbox"/> Scrape Out <input type="checkbox"/> Wash Out								
	CHLORIDE TEST		By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.								
PASS	PAINT FILTER TEST	1									

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document.

DISTRIBUTION: **White** - Company Records / Billing **Yellow** - Customer **Pink** - LF Copy

BOL# 28476

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 03/31/23TIME 1130

Attach test strip here

CUSTOMER Kinder MorganSITE ELPASO pit sitesDRIVER by Gary RobinsonSAMPLE Soil Straight With Dirt XCHLORIDE TEST -281 mg/KgACCEPTED YES X NO PAINT FILTER TEST Time started 1130 Time completed 1142PASS YES X NO SAMPLER/ANALYST Gary Robinson

5796 US Hwy 64, Farmington, NM 87401 || Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 || info@envirotech-inc.com envirotech-inc.com





MANIFEST # 81123 8 pit sites
GENERATOR Kinder Morgan
POINT OF ORIGIN Rio Vista comp
TRANSPORTER Envirotech
DATE 09/01/23 JOB # 14073-0073

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

Generator Onsite Contact _____ Phone _____

Signatures required prior to distribution of the legal document.

DISTRIBUTION:	White - Company Records / Billing	Yellow - Customer	Pink - LF Copy
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0073

BOL# 81123

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 09/01/23 TIME 1025 Attach test strip hereCUSTOMER Rio Vista Co Kinder MorganSITE Rio Vista campDRIVER Anthony FanteSAMPLE Soil Straight _____ With Dirt XCHLORIDE TEST -272 mg/KgACCEPTED YES X NO _____PAINT FILTER TEST Time started 1025 Time completed 1035PASS YES X NO _____SAMPLER/ANALYST Gary Holman

5796 US Hwy 64, Farmington, NM 87401 || Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 || info@envirotech-inc.com envirotech-inc.com



envirotech

Bill of Lading

MANIFEST # 82577

GENERATOR EL PASO

POINT OF ORIGIN See the C-138 for list

TRANSPORTER Envirotech

DATE 11/16/23 JOB # 14073-0087

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	DESTINATION	MATERIAL	GRID	YDS	BBLs	DRUMS	TKT#	TRK#	TIME	DRIVER SIGNATURE
1	B.F	Tank bottom			1 ✓	-	-	725	1430	[Signature]
RESULTS		LANDFARM EMPLOYEE	[Signature]				NOTES			
-272	CHLORIDE TEST									
	CHLORIDE TEST		<input type="checkbox"/> Soil w/ Debris <input type="checkbox"/> After Hours/Weekend Reveal <input type="checkbox"/> Scrape Out <input type="checkbox"/> Wash Out							
	CHLORIDE TEST		By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. Landfarm employee signature is certification of the above material being received and placed accordingly.							
Pass	PAINT FILTER TEST	1								

Generator Onsite Contact	Phone
--------------------------	-------

Signatures required prior to distribution of the legal document.

DISTRIBUTION:

White - Company Records / Billing

Yellow - Customer

Pink - LF Copy

BOL# 82577

CHLORIDE TESTING / PAINT FILTER TESTING

DATE 11/16/23TIME 1430

Attach test strip here

CUSTOMER ELPASOSITE See Bol 82577DRIVER Steven by Gony RSAMPLE Soil Straight With Dirt XCHLORIDE TEST -272 mg/KgACCEPTED YES X NO PAINT FILTER TEST Time started 1430 Time completed 1441PASS YES X NO SAMPLER/ANALYST Gony R

APPENDIX D

Groundwater Analytical Lab Reports



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services Inc
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 6/13/2023 5:53:30 PM Revision 1

JOB DESCRIPTION

Fogelson 4-1 Com #14.00
SDG NUMBER Fogelson

JOB NUMBER

400-238106-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

Eurofins Pensacola

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



Generated
6/13/2023 5:53:30 PM
Revision 1

Authorized for release by
Isabel Enfinger, Project Manager I
isabel.enfinger@et.eurofinsus.com
Designee for
Cheyenne Whitmire, Project Manager II
Cheyenne.Whitmire@et.eurofinsus.com
(850)471-6222

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Laboratory Job ID: 400-238106-1
SDG: Fogelson

Table of Contents

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Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Job ID: 400-238106-1

Laboratory: Eurofins Pensacola

Narrative	Job Narrative 400-238106-1
-----------	-------------------------------

Comments
No additional comments.

Receipt
The samples were received on 5/23/2023 9:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.2° C.

GC/MS VOA
Method 8260D: The matrix spike (MS) recoveries for analytical batch 400-626453 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP-01 (400-238106-2) and MW-10 (400-238106-11). Elevated reporting limits (RLs) are provided.

Method 8260D: The matrix spike (MS) recovery for analytical batch 400-627229 was outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: TRIP BLANK

Lab Sample ID: 400-238106-1

No Detections.

Client Sample ID: DUP-01

Lab Sample ID: 400-238106-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	19		2.0		ug/L	2			8260D	Total/NA
Ethylbenzene	520		2.0		ug/L	2			8260D	Total/NA
Xylenes, Total	380		20		ug/L	2			8260D	Total/NA

Client Sample ID: MW-1R

Lab Sample ID: 400-238106-3

No Detections.

Client Sample ID: MW-2

Lab Sample ID: 400-238106-4

No Detections.

Client Sample ID: MW-3

Lab Sample ID: 400-238106-5

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-238106-6

No Detections.

Client Sample ID: MW-6

Lab Sample ID: 400-238106-7

No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-238106-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	8.3		1.0		ug/L	1			8260D	Total/NA
Ethylbenzene	4.3		1.0		ug/L	1			8260D	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 400-238106-9

No Detections.

Client Sample ID: MW-9

Lab Sample ID: 400-238106-10

No Detections.

Client Sample ID: MW-10

Lab Sample ID: 400-238106-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	19		2.0		ug/L	2			8260D	Total/NA
Ethylbenzene	510		2.0		ug/L	2			8260D	Total/NA
Xylenes, Total	370		20		ug/L	2			8260D	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 400-238106-12

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN

Protocol References:
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-238106-1	TRIP BLANK	Water	05/18/23 17:35	05/23/23 09:10
400-238106-2	DUP-01	Water	05/18/23 17:38	05/23/23 09:10
400-238106-3	MW-1R	Water	05/18/23 19:05	05/23/23 09:10
400-238106-4	MW-2	Water	05/18/23 18:55	05/23/23 09:10
400-238106-5	MW-3	Water	05/18/23 18:52	05/23/23 09:10
400-238106-6	MW-4	Water	05/18/23 18:45	05/23/23 09:10
400-238106-7	MW-6	Water	05/18/23 18:50	05/23/23 09:10
400-238106-8	MW-7	Water	05/18/23 18:40	05/23/23 09:10
400-238106-9	MW-8	Water	05/18/23 18:35	05/23/23 09:10
400-238106-10	MW-9	Water	05/18/23 18:20	05/23/23 09:10
400-238106-11	MW-10	Water	05/18/23 18:10	05/23/23 09:10
400-238106-12	MW-11	Water	05/18/23 18:10	05/23/23 09:10

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Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: TRIP BLANK
Date Collected: 05/18/23 17:35
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/01/23 16:46	1
Toluene	<1.0		1.0		ug/L			06/01/23 16:46	1
Ethylbenzene	<1.0		1.0		ug/L			06/01/23 16:46	1
Xylenes, Total	<10		10		ug/L			06/01/23 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		64 - 132		06/01/23 16:46	1
Dibromofluoromethane	105		75 - 126		06/01/23 16:46	1
4-Bromofluorobenzene	105		72 - 130		06/01/23 16:46	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: DUP-01
Date Collected: 05/18/23 17:38
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	19		2.0		ug/L			05/25/23 14:11	2
Toluene	<2.0		2.0		ug/L			05/25/23 14:11	2
Ethylbenzene	520		2.0		ug/L			05/25/23 14:11	2
Xylenes, Total	380		20		ug/L			05/25/23 14:11	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		64 - 132		05/25/23 14:11	2
1,2-Dichloroethane-d4 (Surr)	80		67 - 134		05/25/23 14:11	2

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-1R

Lab Sample ID: 400-238106-3

Date Collected: 05/18/23 19:05

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 11:35	1
Toluene	<1.0		1.0		ug/L			05/25/23 11:35	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 11:35	1
Xylenes, Total	<10		10		ug/L			05/25/23 11:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		64 - 132		05/25/23 11:35	1
1,2-Dichloroethane-d4 (Surr)	99		67 - 134		05/25/23 11:35	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-2
Date Collected: 05/18/23 18:55
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 12:01	1
Toluene	<1.0		1.0		ug/L			05/25/23 12:01	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 12:01	1
Xylenes, Total	<10		10		ug/L			05/25/23 12:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		64 - 132		05/25/23 12:01	1
1,2-Dichloroethane-d4 (Surr)	103		67 - 134		05/25/23 12:01	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-3

Lab Sample ID: 400-238106-5

Date Collected: 05/18/23 18:52

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 12:27	1
Toluene	<1.0		1.0		ug/L			05/25/23 12:27	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 12:27	1
Xylenes, Total	<10		10		ug/L			05/25/23 12:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		64 - 132					05/25/23 12:27	1
1,2-Dichloroethane-d4 (Surr)	89		67 - 134					05/25/23 12:27	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-4

Lab Sample ID: 400-238106-6

Date Collected: 05/18/23 18:45

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 12:53	1
Toluene	<1.0		1.0		ug/L			05/25/23 12:53	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 12:53	1
Xylenes, Total	<10		10		ug/L			05/25/23 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		64 - 132					05/25/23 12:53	1
1,2-Dichloroethane-d4 (Surr)	99		67 - 134					05/25/23 12:53	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-6
Date Collected: 05/18/23 18:50
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/31/23 17:42	1
Toluene	<1.0		1.0		ug/L			05/31/23 17:42	1
Ethylbenzene	<1.0		1.0		ug/L			05/31/23 17:42	1
Xylenes, Total	<10	F1	10		ug/L			05/31/23 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		64 - 132					05/31/23 17:42	1
Dibromofluoromethane	105		75 - 126					05/31/23 17:42	1
4-Bromofluorobenzene	98		72 - 130					05/31/23 17:42	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-7
Date Collected: 05/18/23 18:40
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	8.3		1.0		ug/L			05/31/23 18:07	1
Toluene	<1.0		1.0		ug/L			05/31/23 18:07	1
Ethylbenzene	4.3		1.0		ug/L			05/31/23 18:07	1
Xylenes, Total	<10		10		ug/L			05/31/23 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		64 - 132					05/31/23 18:07	1
Dibromofluoromethane	102		75 - 126					05/31/23 18:07	1
4-Bromofluorobenzene	96		72 - 130					05/31/23 18:07	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-8

Lab Sample ID: 400-238106-9

Date Collected: 05/18/23 18:35

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 13:20	1
Toluene	<1.0		1.0		ug/L			05/25/23 13:20	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 13:20	1
Xylenes, Total	<10		10		ug/L			05/25/23 13:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		64 - 132					05/25/23 13:20	1
1,2-Dichloroethane-d4 (Surr)	94		67 - 134					05/25/23 13:20	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-9

Lab Sample ID: 400-238106-10

Date Collected: 05/18/23 18:20

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/31/23 18:32	1
Toluene	<1.0		1.0		ug/L			05/31/23 18:32	1
Ethylbenzene	<1.0		1.0		ug/L			05/31/23 18:32	1
Xylenes, Total	<10		10		ug/L			05/31/23 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		64 - 132		05/31/23 18:32	1
Dibromofluoromethane	104		75 - 126		05/31/23 18:32	1
4-Bromofluorobenzene	98		72 - 130		05/31/23 18:32	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-10

Lab Sample ID: 400-238106-11

Date Collected: 05/18/23 18:10

Matrix: Water

Date Received: 05/23/23 09:10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	19		2.0		ug/L			05/25/23 14:36	2
Toluene	<2.0		2.0		ug/L			05/25/23 14:36	2
Ethylbenzene	510		2.0		ug/L			05/25/23 14:36	2
Xylenes, Total	370		20		ug/L			05/25/23 14:36	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		64 - 132		05/25/23 14:36	2
1,2-Dichloroethane-d4 (Surr)	78		67 - 134		05/25/23 14:36	2

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-11
Date Collected: 05/18/23 18:10
Date Received: 05/23/23 09:10

Lab Sample ID: 400-238106-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 13:46	1
Toluene	<1.0		1.0		ug/L			05/25/23 13:46	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 13:46	1
Xylenes, Total	<10		10		ug/L			05/25/23 13:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		64 - 132					05/25/23 13:46	1
1,2-Dichloroethane-d4 (Surr)	97		67 - 134					05/25/23 13:46	1

Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: TRIP BLANK**Lab Sample ID: 400-238106-1****Date Collected: 05/18/23 17:35****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627420	06/01/23 16:46	AGW	EET PEN

Client Sample ID: DUP-01**Lab Sample ID: 400-238106-2****Date Collected: 05/18/23 17:38****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	626453	05/25/23 14:11	BPO	EET PEN

Client Sample ID: MW-1R**Lab Sample ID: 400-238106-3****Date Collected: 05/18/23 19:05****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 11:35	BPO	EET PEN

Client Sample ID: MW-2**Lab Sample ID: 400-238106-4****Date Collected: 05/18/23 18:55****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 12:01	BPO	EET PEN

Client Sample ID: MW-3**Lab Sample ID: 400-238106-5****Date Collected: 05/18/23 18:52****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 12:27	BPO	EET PEN

Client Sample ID: MW-4**Lab Sample ID: 400-238106-6****Date Collected: 05/18/23 18:45****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 12:53	BPO	EET PEN

Client Sample ID: MW-6**Lab Sample ID: 400-238106-7****Date Collected: 05/18/23 18:50****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 17:42	WPD	EET PEN

Eurofins Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: MW-7**Lab Sample ID: 400-238106-8****Date Collected: 05/18/23 18:40****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 18:07	WPD	EET PEN

Client Sample ID: MW-8**Lab Sample ID: 400-238106-9****Date Collected: 05/18/23 18:35****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 13:20	BPO	EET PEN

Client Sample ID: MW-9**Lab Sample ID: 400-238106-10****Date Collected: 05/18/23 18:20****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 18:32	WPD	EET PEN

Client Sample ID: MW-10**Lab Sample ID: 400-238106-11****Date Collected: 05/18/23 18:10****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	626453	05/25/23 14:36	BPO	EET PEN

Client Sample ID: MW-11**Lab Sample ID: 400-238106-12****Date Collected: 05/18/23 18:10****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 13:46	BPO	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-626453/4****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 10:43	BPO	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-627229/4****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 16:56	WPD	EET PEN

Eurofins Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Client Sample ID: Method Blank**Lab Sample ID: MB 400-627420/32****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627420	06/01/23 16:21	AGW	EET PEN

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 400-626453/1002****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	626453	05/25/23 09:32	BPO	EET PEN

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 400-627229/1002****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 16:13	WPD	EET PEN

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 400-627420/1008****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627420	06/01/23 15:20	AGW	EET PEN

Client Sample ID: MW-6**Lab Sample ID: 400-238106-7 MS****Date Collected: 05/18/23 18:50****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 18:56	WPD	EET PEN

Client Sample ID: MW-6**Lab Sample ID: 400-238106-7 MSD****Date Collected: 05/18/23 18:50****Matrix: Water****Date Received: 05/23/23 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	627229	05/31/23 19:21	WPD	EET PEN

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Eurofins Pensacola

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

GC/MS VOA

Analysis Batch: 626453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238106-2	DUP-01	Total/NA	Water	8260D	
400-238106-3	MW-1R	Total/NA	Water	8260D	
400-238106-4	MW-2	Total/NA	Water	8260D	
400-238106-5	MW-3	Total/NA	Water	8260D	
400-238106-6	MW-4	Total/NA	Water	8260D	
400-238106-9	MW-8	Total/NA	Water	8260D	
400-238106-11	MW-10	Total/NA	Water	8260D	
400-238106-12	MW-11	Total/NA	Water	8260D	
MB 400-626453/4	Method Blank	Total/NA	Water	8260D	
LCS 400-626453/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 627229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238106-7	MW-6	Total/NA	Water	8260D	
400-238106-8	MW-7	Total/NA	Water	8260D	
400-238106-10	MW-9	Total/NA	Water	8260D	
MB 400-627229/4	Method Blank	Total/NA	Water	8260D	
LCS 400-627229/1002	Lab Control Sample	Total/NA	Water	8260D	
400-238106-7 MS	MW-6	Total/NA	Water	8260D	
400-238106-7 MSD	MW-6	Total/NA	Water	8260D	

Analysis Batch: 627420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-238106-1	TRIP BLANK	Total/NA	Water	8260D	
MB 400-627420/32	Method Blank	Total/NA	Water	8260D	
LCS 400-627420/1008	Lab Control Sample	Total/NA	Water	8260D	

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-626453/4

Matrix: Water

Analysis Batch: 626453

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/25/23 10:43	1
Toluene	<1.0		1.0		ug/L			05/25/23 10:43	1
Ethylbenzene	<1.0		1.0		ug/L			05/25/23 10:43	1
Xylenes, Total	<10		10		ug/L			05/25/23 10:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		64 - 132		05/25/23 10:43	1
1,2-Dichloroethane-d4 (Surr)	100		67 - 134		05/25/23 10:43	1

Lab Sample ID: LCS 400-626453/1002

Matrix: Water

Analysis Batch: 626453

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	52.2		ug/L		104	70 - 130
Toluene	50.0	53.6		ug/L		107	70 - 130
Ethylbenzene	50.0	56.1		ug/L		112	70 - 130
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	108		64 - 132
1,2-Dichloroethane-d4 (Surr)	89		67 - 134

Lab Sample ID: MB 400-627229/4

Matrix: Water

Analysis Batch: 627229

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			05/31/23 16:56	1
Toluene	<1.0		1.0		ug/L			05/31/23 16:56	1
Ethylbenzene	<1.0		1.0		ug/L			05/31/23 16:56	1
Xylenes, Total	<10		10		ug/L			05/31/23 16:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		64 - 132		05/31/23 16:56	1
1,2-Dichloroethane-d4 (Surr)	96		67 - 134		05/31/23 16:56	1
Dibromofluoromethane	103		75 - 126		05/31/23 16:56	1
4-Bromofluorobenzene	99		72 - 130		05/31/23 16:56	1

Lab Sample ID: LCS 400-627229/1002

Matrix: Water

Analysis Batch: 627229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	48.4		ug/L		97	70 - 130
Toluene	50.0	48.3		ug/L		97	70 - 130
Ethylbenzene	50.0	48.2		ug/L		96	70 - 130
Xylenes, Total	100	96.0		ug/L		96	70 - 130

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QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	99		64 - 132
1,2-Dichloroethane-d4 (Surr)	93		67 - 134
Dibromofluoromethane	102		75 - 126
4-Bromofluorobenzene	99		72 - 130

Lab Sample ID: 400-238106-7 MS

Matrix: Water

Analysis Batch: 627229

Client Sample ID: MW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<1.0		50.0	35.3		ug/L		71	56 - 142
Toluene	<1.0		50.0	33.0		ug/L		66	65 - 130
Ethylbenzene	<1.0		50.0	29.4		ug/L		59	58 - 131
Xylenes, Total	<10	F1	100	56.8	F1	ug/L		57	59 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	101		64 - 132
1,2-Dichloroethane-d4 (Surr)	90		67 - 134
Dibromofluoromethane	99		75 - 126
4-Bromofluorobenzene	99		72 - 130

Lab Sample ID: 400-238106-7 MSD

Matrix: Water

Analysis Batch: 627229

Client Sample ID: MW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<1.0		50.0	43.2		ug/L		86	56 - 142	20	30
Toluene	<1.0		50.0	41.2		ug/L		82	65 - 130	22	30
Ethylbenzene	<1.0		50.0	39.0		ug/L		78	58 - 131	28	30
Xylenes, Total	<10	F1	100	74.6		ug/L		75	59 - 130	27	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	98		64 - 132
1,2-Dichloroethane-d4 (Surr)	89		67 - 134
Dibromofluoromethane	99		75 - 126
4-Bromofluorobenzene	97		72 - 130

Lab Sample ID: MB 400-627420/32

Matrix: Water

Analysis Batch: 627420

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			06/01/23 16:21	1
Toluene	<1.0		1.0		ug/L			06/01/23 16:21	1
Ethylbenzene	<1.0		1.0		ug/L			06/01/23 16:21	1
Xylenes, Total	<10		10		ug/L			06/01/23 16:21	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Toluene-d8 (Surr)	104		64 - 132		06/01/23 16:21	1			
1,2-Dichloroethane-d4 (Surr)	104		67 - 134		06/01/23 16:21	1			

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QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-627420/32

Matrix: Water

Analysis Batch: 627420

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	105		75 - 126		06/01/23 16:21	1
4-Bromofluorobenzene	105		72 - 130		06/01/23 16:21	1

Lab Sample ID: LCS 400-627420/1008

Matrix: Water

Analysis Batch: 627420

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	54.5		ug/L		109	70 - 130
Toluene	50.0	55.9		ug/L		112	70 - 130
Ethylbenzene	50.0	58.2		ug/L		116	70 - 130
Xylenes, Total	100	116		ug/L		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		64 - 132
1,2-Dichloroethane-d4 (Surr)	104		67 - 134
Dibromofluoromethane	105		75 - 126
4-Bromofluorobenzene	100		72 - 130

Chain of Custody Record



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Environment Testing

Client Information			Lab PM:			Carrier Tracking No(s):			COC No:								
Client Contact: Joe Wiley			Sample: Sarah Gardner / Scan (b)(6) / Whitmire, Cheyenne R			State of Origin:			Page:								
Company: El Paso Energy Corporation			PWSID: 303 291 2239			Cheyenne Whitmire@et.eurofinsus.com			Page 1 of 2								
Address: 1001 Louisiana Street Room S1905B			Due Date Requested: Standard			Analysis Requested			Job #:								
City: Houston			TAT Requested (days): Standard														
State, Zip: TX, 77002			Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
Phone:			PO #: WD1077460														
Email: oe.wiley@kindermorgan.com			WO #: Fogelson 4-1 Com #14_ ERG_ ARF_ 04-26-2023														
Project Name: Fogelson 4-1 Com #14.00			Project #: 40015823														
Site: Fogelson			SSOW#:														
Sample Identification			Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8260D - BTEX - 8260	400-238106 COC	QR Code	Preservation Codes:	Special Instructions/Note:				
Trip Blank			5/18/23	1735	—	—	Water	—	—	—		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	Trip Blank				
DUP-01			5/18/23	1738	G	G	Water	—	—	—			Unpreserved				
mw-1R			5/18/23	1905	G	G	Water	—	—	—			Unpreserved				
mw-2			5/18/23	1855	G	G	Water	—	—	—			Unpreserved				
mw-3			5/18/23	1852	G	G	Water	—	—	—			Unpreserved				
mw-4			5/18/23	1845	G	G	Water	—	—	—			Unpreserved				
mw-6			5/18/23	1850	G	G	Water	—	—	—			Unpreserved				
mw-7			5/18/23	1840	G	G	Water	—	—	—			Unpreserved				
mw-8			5/19/23	1835	G	G	Water	—	—	—			Unpreserved				
mw-9			5/19/23	1820	G	G	Water	—	—	—			Unpreserved				
mw-10			5/18/23	1810	G	G	Water	—	—	—			Unpreserved				
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological												Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)												Special Instructions/QC Requirements:					
Empty Kit Relinquished by:												Method of Shipment:					
Relinquished by: [Signature]			Date: 5/22/23			Company: Santec			Received by: [Signature]			Date/Time: 5/23/23 910			Company: [Signature]		
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:			Company:		
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:			Company:		
Custody Seals Intact: A Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks: 5.7 °C 18.8											

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-238106-1

SDG Number: Fogelson

Login Number: 238106**List Number: 1****Creator: Perez, Trina M****List Source: Eurofins Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.2°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-238106-1
SDG: Fogelson

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-23
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-0689	09-01-23
California	State	2510	06-30-23
Florida	NELAP	E81010	06-30-23
Georgia	State	E81010(FL)	06-30-23
Illinois	NELAP	200041	10-09-23
Kansas	NELAP	E-10253	10-31-23
Kentucky (UST)	State	53	06-30-23
Louisiana (All)	NELAP	30976	06-30-23
Louisiana (DW)	State	LA017	12-31-23
Maryland	State	233	09-30-23
Michigan	State	9912	06-30-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-23
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-23
Tennessee	State	TN02907	06-30-23
Texas	NELAP	T104704286	09-30-23
US Fish & Wildlife	US Federal Programs	A22340	06-30-23
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-23
West Virginia DEP	State	136	03-31-24



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ANALYTICAL REPORT

PREPARED FOR

Attn: Steve Varsa
Stantec Consulting Services Inc
11311 Aurora Avenue
Des Moines, Iowa 50322-7904

Generated 11/29/2023 10:51:50 PM

JOB DESCRIPTION

Fogelson 4-1 Com #14.00

JOB NUMBER

400-246564-1

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

Eurofins Pensacola

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Southeast, LLC Project Manager.

Authorization



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Authorized for release by
Cheyenne Whitmire, Project Manager II
Cheyenne.Whitmire@et.eurofinsus.com
(850)471-6222

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Laboratory Job ID: 400-246564-1

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Case Narrative

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Job ID: 400-246564-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-246564-1

Receipt

The samples were received on 11/10/2023 9:19 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C

GC/MS VOA

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-650306 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-1R

Lab Sample ID: 400-246564-1

No Detections.

Client Sample ID: MW-4

Lab Sample ID: 400-246564-2

No Detections.

Client Sample ID: MW-7

Lab Sample ID: 400-246564-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.3		1.0		ug/L	1		8260D	Total/NA
Ethylbenzene	1.0		1.0		ug/L	1		8260D	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 400-246564-4

No Detections.

Client Sample ID: MW-9

Lab Sample ID: 400-246564-5

No Detections.

Client Sample ID: MW-11

Lab Sample ID: 400-246564-6

No Detections.

Client Sample ID: DUP-01

Lab Sample ID: 400-246564-7

No Detections.

Client Sample ID: TB-01

Lab Sample ID: 400-246564-8

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Pensacola

Method Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-246564-1	MW-1R	Water	11/08/23 17:50	11/10/23 09:19
400-246564-2	MW-4	Water	11/08/23 17:59	11/10/23 09:19
400-246564-3	MW-7	Water	11/08/23 18:05	11/10/23 09:19
400-246564-4	MW-8	Water	11/08/23 18:15	11/10/23 09:19
400-246564-5	MW-9	Water	11/08/23 18:22	11/10/23 09:19
400-246564-6	MW-11	Water	11/08/23 18:28	11/10/23 09:19
400-246564-7	DUP-01	Water	11/08/23 12:00	11/10/23 09:19
400-246564-8	TB-01	Water	11/08/23 17:45	11/10/23 09:19



Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-1R
Date Collected: 11/08/23 17:50
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/15/23 02:37	1
Ethylbenzene	<1.0		1.0		ug/L			11/15/23 02:37	1
Toluene	<1.0		1.0		ug/L			11/15/23 02:37	1
Xylenes, Total	<10		10		ug/L			11/15/23 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		72 - 130		11/15/23 02:37	1
Dibromofluoromethane	116		75 - 126		11/15/23 02:37	1
Toluene-d8 (Surr)	99		64 - 132		11/15/23 02:37	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-4

Lab Sample ID: 400-246564-2

Date Collected: 11/08/23 17:59

Matrix: Water

Date Received: 11/10/23 09:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/15/23 03:04	1
Ethylbenzene	<1.0		1.0		ug/L			11/15/23 03:04	1
Toluene	<1.0		1.0		ug/L			11/15/23 03:04	1
Xylenes, Total	<10		10		ug/L			11/15/23 03:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		72 - 130		11/15/23 03:04	1
Dibromofluoromethane	116		75 - 126		11/15/23 03:04	1
Toluene-d8 (Surr)	103		64 - 132		11/15/23 03:04	1

Eurofins Pensacola

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-7
Date Collected: 11/08/23 18:05
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.3		1.0		ug/L			11/15/23 03:31	1
Ethylbenzene	1.0		1.0		ug/L			11/15/23 03:31	1
Toluene	<1.0		1.0		ug/L			11/15/23 03:31	1
Xylenes, Total	<10		10		ug/L			11/15/23 03:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		72 - 130					11/15/23 03:31	1
Dibromofluoromethane	110		75 - 126					11/15/23 03:31	1
Toluene-d8 (Surr)	100		64 - 132					11/15/23 03:31	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-8
Date Collected: 11/08/23 18:15
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/15/23 03:57	1
Ethylbenzene	<1.0		1.0		ug/L			11/15/23 03:57	1
Toluene	<1.0		1.0		ug/L			11/15/23 03:57	1
Xylenes, Total	<10		10		ug/L			11/15/23 03:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	109		72 - 130		11/15/23 03:57	1
Dibromofluoromethane	114		75 - 126		11/15/23 03:57	1
Toluene-d8 (Surr)	102		64 - 132		11/15/23 03:57	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-9

Lab Sample ID: 400-246564-5

Date Collected: 11/08/23 18:22

Matrix: Water

Date Received: 11/10/23 09:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/18/23 09:06	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/23 09:06	1
Toluene	<1.0		1.0		ug/L			11/18/23 09:06	1
Xylenes, Total	<10		10		ug/L			11/18/23 09:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		72 - 130		11/18/23 09:06	1
Dibromofluoromethane	97		75 - 126		11/18/23 09:06	1
Toluene-d8 (Surr)	107		64 - 132		11/18/23 09:06	1

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Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-11
Date Collected: 11/08/23 18:28
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/18/23 09:32	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/23 09:32	1
Toluene	<1.0		1.0		ug/L			11/18/23 09:32	1
Xylenes, Total	<10		10		ug/L			11/18/23 09:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		72 - 130		11/18/23 09:32	1
Dibromofluoromethane	99		75 - 126		11/18/23 09:32	1
Toluene-d8 (Surr)	107		64 - 132		11/18/23 09:32	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: DUP-01
Date Collected: 11/08/23 12:00
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/15/23 12:31	1
Ethylbenzene	<1.0	F1	1.0		ug/L			11/15/23 12:31	1
Toluene	<1.0		1.0		ug/L			11/15/23 12:31	1
Xylenes, Total	<10	F1	10		ug/L			11/15/23 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	106		72 - 130		11/15/23 12:31	1
Dibromofluoromethane	116		75 - 126		11/15/23 12:31	1
Toluene-d8 (Surr)	100		64 - 132		11/15/23 12:31	1

Client Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: TB-01

Lab Sample ID: 400-246564-8

Date Collected: 11/08/23 17:45

Matrix: Water

Date Received: 11/10/23 09:19

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/23 09:38	1
Ethylbenzene	<1.0		1.0		ug/L			11/20/23 09:38	1
Toluene	<1.0		1.0		ug/L			11/20/23 09:38	1
Xylenes, Total	<10		10		ug/L			11/20/23 09:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 130		11/20/23 09:38	1
Dibromofluoromethane	114		75 - 126		11/20/23 09:38	1
Toluene-d8 (Surr)	92		64 - 132		11/20/23 09:38	1

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Definitions/Glossary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: MW-1R**Lab Sample ID: 400-246564-1****Date Collected: 11/08/23 17:50****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/15/23 02:37	BPO	EET PEN

Client Sample ID: MW-4**Lab Sample ID: 400-246564-2****Date Collected: 11/08/23 17:59****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/15/23 03:04	BPO	EET PEN

Client Sample ID: MW-7**Lab Sample ID: 400-246564-3****Date Collected: 11/08/23 18:05****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/15/23 03:31	BPO	EET PEN

Client Sample ID: MW-8**Lab Sample ID: 400-246564-4****Date Collected: 11/08/23 18:15****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/15/23 03:57	BPO	EET PEN

Client Sample ID: MW-9**Lab Sample ID: 400-246564-5****Date Collected: 11/08/23 18:22****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650935	11/18/23 09:06	WPD	EET PEN

Client Sample ID: MW-11**Lab Sample ID: 400-246564-6****Date Collected: 11/08/23 18:28****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650935	11/18/23 09:32	WPD	EET PEN

Client Sample ID: DUP-01**Lab Sample ID: 400-246564-7****Date Collected: 11/08/23 12:00****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650306	11/15/23 12:31	BPO	EET PEN

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Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: TB-01**Lab Sample ID: 400-246564-8****Date Collected: 11/08/23 17:45****Matrix: Water****Date Received: 11/10/23 09:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650992	11/20/23 09:38	WPD	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-650283/3****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/14/23 19:02	BPO	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-650306/3****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650306	11/15/23 11:10	BPO	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-650935/4****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650935	11/18/23 08:41	WPD	EET PEN

Client Sample ID: Method Blank**Lab Sample ID: MB 400-650992/5****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650992	11/20/23 08:20	WPD	EET PEN

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 400-650283/1001****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650283	11/14/23 17:55	BPO	EET PEN

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 400-650306/1001****Date Collected: N/A****Matrix: Water****Date Received: N/A**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650306	11/15/23 10:04	BPO	EET PEN

Eurofins Pensacola

Lab Chronicle

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-650935/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650935	11/18/23 07:51	WPD	EET PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-650992/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650992	11/20/23 07:22	WPD	EET PEN

Client Sample ID: DUP-01
Date Collected: 11/08/23 12:00
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-7 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650306	11/15/23 16:31	BPO	EET PEN

Client Sample ID: DUP-01
Date Collected: 11/08/23 12:00
Date Received: 11/10/23 09:19

Lab Sample ID: 400-246564-7 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	650306	11/15/23 16:58	BPO	EET PEN

Laboratory References:
EET PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

GC/MS VOA

Analysis Batch: 650283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246564-1	MW-1R	Total/NA	Water	8260D	
400-246564-2	MW-4	Total/NA	Water	8260D	
400-246564-3	MW-7	Total/NA	Water	8260D	
400-246564-4	MW-8	Total/NA	Water	8260D	
MB 400-650283/3	Method Blank	Total/NA	Water	8260D	
LCS 400-650283/1001	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 650306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246564-7	DUP-01	Total/NA	Water	8260D	
MB 400-650306/3	Method Blank	Total/NA	Water	8260D	
LCS 400-650306/1001	Lab Control Sample	Total/NA	Water	8260D	
400-246564-7 MS	DUP-01	Total/NA	Water	8260D	
400-246564-7 MSD	DUP-01	Total/NA	Water	8260D	

Analysis Batch: 650935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246564-5	MW-9	Total/NA	Water	8260D	
400-246564-6	MW-11	Total/NA	Water	8260D	
MB 400-650935/4	Method Blank	Total/NA	Water	8260D	
LCS 400-650935/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 650992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-246564-8	TB-01	Total/NA	Water	8260D	
MB 400-650992/5	Method Blank	Total/NA	Water	8260D	
LCS 400-650992/1002	Lab Control Sample	Total/NA	Water	8260D	

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QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-650283/3

Matrix: Water

Analysis Batch: 650283

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/14/23 19:02	1
Ethylbenzene	<1.0		1.0		ug/L			11/14/23 19:02	1
Toluene	<1.0		1.0		ug/L			11/14/23 19:02	1
Xylenes, Total	<10		10		ug/L			11/14/23 19:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		72 - 130		11/14/23 19:02	1
Dibromofluoromethane	109		75 - 126		11/14/23 19:02	1
Toluene-d8 (Surr)	103		64 - 132		11/14/23 19:02	1

Lab Sample ID: LCS 400-650283/1001

Matrix: Water

Analysis Batch: 650283

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	53.3		ug/L		107	70 - 130
m-Xylene & p-Xylene	50.0	50.0		ug/L		100	70 - 130
o-Xylene	50.0	48.8		ug/L		98	70 - 130
Ethylbenzene	50.0	51.3		ug/L		103	70 - 130
Toluene	50.0	54.2		ug/L		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	109		72 - 130
Dibromofluoromethane	105		75 - 126
Toluene-d8 (Surr)	105		64 - 132
1,2-Dichloroethane-d4 (Surr)	107		67 - 134

Lab Sample ID: MB 400-650306/3

Matrix: Water

Analysis Batch: 650306

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/15/23 11:10	1
Ethylbenzene	<1.0		1.0		ug/L			11/15/23 11:10	1
Toluene	<1.0		1.0		ug/L			11/15/23 11:10	1
Xylenes, Total	<10		10		ug/L			11/15/23 11:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		72 - 130		11/15/23 11:10	1
Dibromofluoromethane	113		75 - 126		11/15/23 11:10	1
Toluene-d8 (Surr)	102		64 - 132		11/15/23 11:10	1

Lab Sample ID: LCS 400-650306/1001

Matrix: Water

Analysis Batch: 650306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	54.9		ug/L		110	70 - 130

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QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-650306/1001

Matrix: Water

Analysis Batch: 650306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
m-Xylene & p-Xylene	50.0	53.8		ug/L		108	70 - 130
o-Xylene	50.0	52.6		ug/L		105	70 - 130
Ethylbenzene	50.0	54.6		ug/L		109	70 - 130
Toluene	50.0	56.7		ug/L		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	108		72 - 130
Dibromofluoromethane	108		75 - 126
Toluene-d8 (Surr)	105		64 - 132
1,2-Dichloroethane-d4 (Surr)	113		67 - 134

Lab Sample ID: 400-246564-7 MS

Matrix: Water

Analysis Batch: 650306

Client Sample ID: DUP-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<1.0		50.0	38.7		ug/L		77	56 - 142
m-Xylene & p-Xylene	<5.0	F1	50.0	26.4	F1	ug/L		53	57 - 130
o-Xylene	<5.0	F1	50.0	27.3	F1	ug/L		55	61 - 130
Ethylbenzene	<1.0	F1	50.0	27.6	F1	ug/L		55	58 - 131
Toluene	<1.0		50.0	34.5		ug/L		69	65 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	108		72 - 130
Dibromofluoromethane	108		75 - 126
Toluene-d8 (Surr)	103		64 - 132
1,2-Dichloroethane-d4 (Surr)	114		67 - 134

Lab Sample ID: 400-246564-7 MSD

Matrix: Water

Analysis Batch: 650306

Client Sample ID: DUP-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<1.0		50.0	38.6		ug/L		77	56 - 142	0	30
m-Xylene & p-Xylene	<5.0	F1	50.0	27.3	F1	ug/L		55	57 - 130	4	30
o-Xylene	<5.0	F1	50.0	28.3	F1	ug/L		57	61 - 130	4	30
Ethylbenzene	<1.0	F1	50.0	28.4	F1	ug/L		57	58 - 131	3	30
Toluene	<1.0		50.0	35.3		ug/L		71	65 - 130	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	112		72 - 130
Dibromofluoromethane	107		75 - 126
Toluene-d8 (Surr)	103		64 - 132
1,2-Dichloroethane-d4 (Surr)	114		67 - 134

Eurofins Pensacola

QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-650935/4

Matrix: Water

Analysis Batch: 650935

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/18/23 08:41	1
Ethylbenzene	<1.0		1.0		ug/L			11/18/23 08:41	1
Toluene	<1.0		1.0		ug/L			11/18/23 08:41	1
Xylenes, Total	<10		10		ug/L			11/18/23 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		72 - 130		11/18/23 08:41	1
Dibromofluoromethane	94		75 - 126		11/18/23 08:41	1
Toluene-d8 (Surr)	106		64 - 132		11/18/23 08:41	1

Lab Sample ID: LCS 400-650935/1002

Matrix: Water

Analysis Batch: 650935

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	52.7		ug/L		105	70 - 130
m-Xylene & p-Xylene	50.0	55.9		ug/L		112	70 - 130
o-Xylene	50.0	54.0		ug/L		108	70 - 130
Ethylbenzene	50.0	55.7		ug/L		111	70 - 130
Toluene	50.0	55.1		ug/L		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	105		72 - 130
Dibromofluoromethane	95		75 - 126
Toluene-d8 (Surr)	103		64 - 132
1,2-Dichloroethane-d4 (Surr)	109		67 - 134

Lab Sample ID: MB 400-650992/5

Matrix: Water

Analysis Batch: 650992

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.0		1.0		ug/L			11/20/23 08:20	1
Ethylbenzene	<1.0		1.0		ug/L			11/20/23 08:20	1
Toluene	<1.0		1.0		ug/L			11/20/23 08:20	1
Xylenes, Total	<10		10		ug/L			11/20/23 08:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		72 - 130		11/20/23 08:20	1
Dibromofluoromethane	112		75 - 126		11/20/23 08:20	1
Toluene-d8 (Surr)	91		64 - 132		11/20/23 08:20	1

Lab Sample ID: LCS 400-650992/1002

Matrix: Water

Analysis Batch: 650992

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	50.0	48.5		ug/L		97	70 - 130

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QC Sample Results

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-650992/1002				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 650992							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
m-Xylene & p-Xylene	50.0	43.2		ug/L		86	70 - 130
o-Xylene	50.0	43.4		ug/L		87	70 - 130
Ethylbenzene	50.0	42.7		ug/L		85	70 - 130
Toluene	50.0	42.7		ug/L		85	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	100		72 - 130				
Dibromofluoromethane	103		75 - 126				
Toluene-d8 (Surr)	92		64 - 132				
1,2-Dichloroethane-d4 (Surr)	113		67 - 134				

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3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001 Fax: 850-478-2671

Chain of Custody Record



Environment Testing

Client Information Client Contact: Joe Wiley Company: El Paso Energy Corporation Address: 1001 Louisiana Street Room S1905B City: Houston State, Zip: TX, 77002 Phone: Email: joe.wiley@kindermorgan.com Project Name: Fogelson 4-1 Com #14.00 Site:		SRC + ERB Phone: 515-253-0830 PWSID:		Lab PM: Whitmire, Cheyenne R E-Mail: Cheyenne.Whitmire@et.eurofinsus.com Carrier: 400-246554 COC State of:		COC No: 400-124029-41352.2 Page 1 of 1 Job #: ERB						
		Due Date Requested: 5/10 TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: WD1077460 WO #: Fogelson 4-1 Com #14. ERG_ARF_10_24_2023 Project #: 40015823 SSO#:		Analysis Requested <div style="text-align: center; font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">ERG</div>				Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)				
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, Air)	Field Filled Sample (Yes or No) 5260D - BTEX - 5260 5260D - BTEX - 5260				Job Number(s) (if multiple)		Special Instructions/Note:
MW-1R MW-4 MW-7 MW-8 MW-9 MW-11 Dup-01 TB-01		4/8/2023 11/9/2023 11/8/2023 11/8/2023 11/8/2023 11/8/2023 11/8/2023 11/8/2023	1750 1839 1805 1815 1822 1828 — 1745	G G G G G G G	Water Water Water Water Water Water Water	<div style="text-align: center; font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">ERG</div>						
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		
Relinquished by: Emma Bradley Date/Time: 11/9/2023 1500 Company: Stantec		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		Relinquished by:		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.5°C ERB								

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Stantec Consulting Services Inc

Job Number: 400-246564-1

Login Number: 246564

List Source: Eurofins Pensacola

List Number: 1

Creator: Roberts, Alexis J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Stantec Consulting Services Inc
Project/Site: Fogelson 4-1 Com #14.00

Job ID: 400-246564-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-24
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-24
Florida	NELAP	E81010	06-30-24
Georgia	State	E81010(FL)	06-30-24
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-24
Louisiana (All)	NELAP	30976	06-30-24
Louisiana (DW)	State	LA017	12-31-23
North Carolina (WW/SW)	State	314	12-31-23
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-24
South Carolina	State	96026	06-30-24
Tennessee	State	TN02907	06-30-24
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-24
USDA	US Federal Programs	P330-21-00056	05-17-24
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-24
West Virginia DEP	State	136	03-31-24
West Virginia DEP	State	136	03-31-24

Eurofins Pensacola

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District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 325226

CONDITIONS

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID:
	7046
	Action Number: 325226
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Fogelson 4-1 2023 Annual Groundwater Report: Content Satisfactory 1. Conduct groundwater monitoring events as scheduled on a semi-annual basis. 2. Conduct analyses for BTEX, EPA method 8260 on key wells. 3. Increase sampling to quarterly when constituents have demonstrated below the WQCC human health standards. 4. Continue removal of LNAPL as appropriate for the site. 5. Submit the 2024 Annual Report by April 1, 2025, to OCD.	6/27/2024